

1898.

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ANNUAL REPORT  
ON THE HEALTH  
OF THE  
Rural Sanitary District  
OF THE  
ISLE OF WIGHT.

BY  
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ISLE OF WIGHT:  
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# ANNUAL REPORT ON THE HEALTH OF THE RURAL SANITARY DISTRICT OF THE ISLE OF WIGHT, FOR THE YEAR 1898.

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*To the Members of the Isle of Wight Rural District Council.  
GENTLEMEN,*

I have the honour to report to you on the health of your district in 1898. By describing briefly the vital statistics, the sanitary history of the year, and the state of the district generally at the end of the year, I shall be enabled to include all the subjects of which the Order of the Local Government Board requires me to treat.

## I. VITAL STATISTICS.

Some of the figures I shall submit to you are necessarily approximate. By the action of the County Council considerable changes have been made in your district during the present decade. On account of the indifference to the important statistical interests of your district which has obtained, it has been impossible to preserve their accuracy.

## Population.

At the last census (1891) the population of the Isle of Wight Rural Sanitary District numbered 29,747. In 1881 it numbered 28,008. Since 1891 2,515 of population have been transferred from the rural to urban districts. But for this interference the population of your district in the middle of 1898 would have been, it is estimated, 30,964. For the purposes of this report it is assumed to have been 28,750, in which number the inmates of the Asylum are included.

The natural increase of population, by excess of births over deaths, was 184.

## Population to the aere.

There are 85,114 acres in the district. There were 87,599 in 1891, of which 1,785 acres, much of it farm land, have been added to the towns. The average population to the aere was 0·335, or one person to 2·98 acres.

## Births and Deaths.

605 births and 421 deaths were registered as having occurred in your district in 1898. 293 boys and 312 girls were born. 40 of the births—19 boys and 21 girls—were illegitimate. 237 deaths were those of males, and 184 those of females.

The births and deaths in each quarter were as follows:

	BIRTHS.			DEATHS.		
	M.	F.	Total.	M.	F.	Total.
1st quarter..	59	68	127	65	57	122
2nd „	72	83	155	64	47	111
3rd „	80	83	163	65	38	103
4th „	82	78	160	43	42	85
	—	—	—	—	—	—
	293	312	605	237	184	421

The birth-rate in the Isle of Wight Rural Sanitary District in 1898, was 21·0 per 1000 of the population, which is the lowest recorded birth-rate of your district. It was 24·2 per 1000 in 1897, 24·8 in 1896, 26·2 in 1895, 22·5 in 1894, and 25·9 in 1893. The death-rate was 14·6 per 1000 living. But at least 79 persons died in the district, who did not form part of the permanent population, and deducting these, the death-rate is reduced to 11·8 per 1000. These are low death-rates, but they are above the very low rates of 1897, which were 13·2 and 10·5 per 1000.

The mean birth-rate in the ten years 1888-97 was 25·0 and the mean death-rate was 15·8 per 1000 living. Upon comparing the mean birth-rate and the mean death-rate of ten years with the birth-rate and death-rate of 1898, we find the birth-rate of the year under review was 4·0 and the death-rate 1·2 below the average.

The birth-rate in England and Wales in 1898, was 29·4 per 1000 of the population, which is lower than that in any other year on record; compared with the average in the ten years 1888-97, the birth-rate in 1898 shows a decrease of 1·1 per 1000. The death-rate in 1898, was 17·6 per 1000, which is lower than the rate in any previous year, excepting 1894, 1896, and 1897; compared with the average in the ten years 1888-97, the death-rate in 1898 shows a decrease of 0·8 per 1000.

The death-rate in country districts, that is to say among the population resident in the area outside the boundaries of urban sanitary districts, was 16·0 per 1000. The mean death-rate in country districts of the ten years 1888-97, was 16·8 per 1000.

Comparison of  
the Birth-rate  
and Death-rate  
in the I.W. Rural  
Sanitary District  
with those of  
England and  
Wales.

The birth-rate in the Isle of Wight Rural Sanitary District in 1898, was 8·4 below the birth-rate of England and Wales, and 9·5 below the mean birth-rate in the ten years 1888—97. The death-rate was 3·0 below the death-rate of England and Wales, and 3·8 below the mean annual death-rate of the ten years 1888—97. Deducting the deaths among strangers, it was 5·8 below the general death-rate of the year, and 6·6 below the average death-rate of the ten years 1888—97. It was 1·4 below the death-rate in country districts; or deducting the deaths among temporary residents, 4·2 below it; and it was 2·2 below the mean annual death-rate in rural districts in the ten years 1888—97, or, deducting the deaths among strangers, 5·0 below it.

Comparing the death-rate of the Isle of Wight Rural Sanitary District in each of the ten years 1889—98, with the death-rate of England and Wales, and with that of the rural registration sub-districts in the same years, we find it was in

	ENGLAND AND WALES.	RURAL DISTRICTS.
1889	1·4 below the average.	0·2 above the average.
1890	4·1 „ „ „	2·4 below „ „
1891	3·7 „ „ „	2·0 „ „ „
1892	0·7 „ „ „	0·2 above „ „
1893	4·6 „ „ „	2·8 below „ „
1894	0·3 above „ „ „	1·3 above „ „
1895	1·9 below „ „ „	0·2 below „ „
1896	3·6 „ „ „	1·8 „ „ „
1897	4·2 „ „ „	2·6 „ „ „
1898	3·1 „ „ „	1·5 „ „ „

Male and Female  
Death-rate.

In 1898, 8·5 males per 1000 of the population of your district died, and 6·4 females.

61 of the deaths registered were those of infants who <sup>Infant Mortality</sup> died under one year of age. The proportion of deaths under one year of age to registered births was 100 per 1000. The mean proportion of deaths under one year to registered births in the ten years 1888-97 was 93·4 per 1000. In England and Wales the rate of mortality under one year of age per 1000 registered births was 161, which was 12 per 1000 above the mean proportion in the ten years 1888-97. In your district it was 6·6 per 1000 above the mean of the district. Excluding 100 larger towns the mortality under one year was equal to 145 per 1000 in England and Wales. In the Isle of Wight Rural Sanitary District in 1898 the infant mortality was 61 per 1000 below that of the country generally, and 45 per 1000 below that of the country after the exclusion of 100 large towns.

85 children, 20 per cent. of all the deaths, died under 5 years of age; and 24 children, or 5·7 of the deaths, died between one and five years. The deaths between one year and sixty-five numbered 200, or 47·5 of the deaths.

160 persons died at 65 and upwards, which is equivalent to 38 per cent. of the deaths at all ages, a high proportion. Of these, 32 died between 65 and 70, 66 between 70 and 80, 50 between 80 and 90, and 11 died over 90. Seven of these were men and four were women. Of the seven men two had been farm labourers, one a fisherman, two were engaged in business, one as a house agent and the other as a bazaar keeper, and two were of independent means. Of the women, one was the widow of a farm labourer, another of a carpenter, one who died at 95 was a woman of independent means, and another, the widow of a wine merchant, died at Bonchurch at 98. This was the greatest age at death registered in your district in 1898.

## Deaths of strangers in the District.

79 of the deaths were those of persons not permanently resident in the district. Doubtless other deaths among the visiting population occurred, but unless the fact is stated to the sub-registrars and reported by them it is difficult to identify them. Occasionally I can do so from personal knowledge. In the public institutions the deaths among strangers are carefully noted. For example, 46 persons who were properly part of the urban population of the Island died in the Workhouse, and 10 of the 14 deaths among strangers in the Lunatic Asylum. 16 persons died in the National Hospital for Consumption, all of whom were strangers to the Island. One non-Island resident died in the Calbourne sub-registration district, and another in that of Newport, and a dead body was washed ashore in the Ryde sub-district. In all 22 persons from "over the water" died in the Isle of Wight Rural Sanitary District in 1898.

I regret a remark of mine under this heading in my last annual report was misconstrued. I stated that 30 persons who died in the Consumption Hospital in 1897 had come here to die. I spoke advisedly, but the same remark would apply to all those who are permitted to leave the comforts of home and to make long journeys in inclement seasons when they are in the last stages of consumption. I know accidents must happen in phthisis, and that patients will die of haemorrhage in cases in which there is very little evidence of pulmonary tuberculosis; but such institutions as the National Hospital for Consumption are places in which the latest scientific knowledge of the day is applied to the cure and relief of persons who are amenable to the methods applied, and in my opinion many persons I have met travelling to

English health resorts and to the south of Europe in winter, must have been not only beyond hope of relief but would be a positive source of danger in institutions they may enter, or to some people with whom they might come into intimate contact. The mean mortality in the Consumption Hospital at St. Lawrence in the ten years 1888-97 was 27.8. It is satisfactory to note that in 1898 it was 11.8 below the average.

9 Persons died a violent death. A boy was murdered in the Barrack-field at Parkhurst by a man recently discharged from a lunatic asylum. 3 men committed suicide—one by shooting, one by hanging, and one cut his throat. 2 were accidentally drowned—one, a girl, by falling into the estuary of the Medina, and the body of a Southampton man was found on the shore at Quarr who was drowned by the capsising of a boat in the Solent. A child died from exposure near Sandown. An under-graduate of Cambridge University accidentally fell from the cliff at Bembridge. And a lunatic prisoner at Parkhurst Prison fractured his skull while attempting to jump a fence. 2.1 per cent. of the deaths in 1898 were due to violence, and .31 per 1000 of the population. In 1897 the deaths from violence were 1.8 per cent. of the deaths and .24 per 1000 of the population. In 1896 they were 4.9 per cent., and .66 per 1000 respectively; and in 1895, 2.6 per cent. and .47 per 1000. The mean percentage of deaths from violence in the Isle of Wight Rural Sanitary District in the ten years 1888-97 was 3.4. In England and Wales the deaths referred to various forms of violence in 1898 were in the proportion of .61 per 1000 of the population against .64 and .66 in the two previous years. Inquests were held in 6.2 per cent. of all the deaths in England and Wales.

Deaths from violence.

Mortality from  
certain diseases.  
Zymotic diseases  
included.

The 421 deaths from all causes included—

	7	attributed to diphtheria.
2	„	enteric fever
1	„	puerperal fever
2	„	measles.
3	„	whooping cough.
8	„	diarrhœa and dysentry.
<hr/>		
	23	

Zymotic Death-  
rate. .

These 23 deaths from zymotic disease were equal to a death rate of 0.70 per 1,000 living and to 5.4 per cent. of all the deaths. The zymotic death rates of the two previous years were 0.77 and 0.87 per 1,000 of the population of your district. The mean zymotic death-rate in the Isle of Wight Rural Sanitary District in the ten years 1888-97 was 1.06. The zymotic death-rate in England and Wales in 1898 was 2.22 per 1,000 living, against 2.21 and 2.17 respectively in the two preceding years. The average annual zymotic death-rate in England and Wales during the decennium 1881-90 was 2.30 per 1,000 living, against 3.95, 4.15, and 3.38 per 1,000 respectively in the three decennia comprised in the period 1851-80.

Phthisis.

The deaths from consumption, which numbered 50, were equivalent to a rate of 1.73 per 1,000 living. 15 of these occurred in the Royal National Hospital for Consumption among visitors to the Island; and 4 in the Workhouse and 2 in the Asylum among Island residents who were visitors to your district. Deducting these, the death-rate from phthisis was 1.00 per 1,000 of the population of your district. It was 1.21 per 1,000 living if we exclude only the deaths among strangers to the Island. The percentage of phthisis to all the deaths was

11.87, or deducting the deaths among visitors from the mainland, 8.31, and of Island visitors to your district 6.88. The percentage of deaths from phthisis to all the deaths in England and Wales is 9.3.

Bronchitis, pneumonia, and pleurisy caused the deaths Lung disease. of 47 persons, 15 of whom died under five years of age, and 5 of whom did not belong to your district. This is equivalent to a death-rate of 1.6 per 1,000 living, and to a percentage of 11.1 of the deaths. 3.3 is the mean death-rate in these diseases.

Heart disease caused the deaths of 37 persons, 8 of Heart disease. whom were strangers to the district. The deaths from heart disease were equal to a rate of 1.2 per 1,000. The mean death-rate from heart disease is 1.3 per 1,000. The percentage of deaths from heart disease to all the deaths was 8.7.

27 deaths from the different forms of cancer were Cancer. registered, equivalent to 6.4 per cent. of the deaths from all causes. The mean percentage of deaths from cancer in England and Wales is 2.7.

6 cases of death were registered as having occurred Serofula. from some form of serofula other than what is usually understood as pulmonary tuberculosis or consumption. This is equivalent to a percentage of 1.4 of the deaths. The percentage of deaths from this disease in England and Wales to all the deaths is 3.6.

The notifications of infectious disease in your district Notified diseases. in 1898 numbered 97. They were equal to 3.37 per 1,000 of the population. They included the notifications of 44 cases of scarlatina, 30 cases of diphtheria, 7 of enteric fever, one of puerperal fever, and 9 of erysipelas.

It is required that the deaths in public institutions, of which there are several in your district, be classified separately in the table which accompanies this report. This is done, but the deaths which occur in the barracks at Parkhurst are treated differently from those which take place in Parkhurst Prison. In the former case all deaths—whether of women or children or combatants—within the barracks are classified because the population is homogeneous in the sense that it is part of the regiment quartered there for the time being; but in the case of Parkhurst Prison only deaths among the prisoners are classified. A large staff of officials are employed who, with their families, form part of the permanent population of your district. They not only reside in two of the registration sub-districts—a stream which runs through the prison grounds divides the Newport from the Cowes sub-district—but within the boundaries of the Borough of Newport.

Cancer death-rate.

I have frequently pointed out to you that among the deaths the percentage of deaths from cancer in your district is excessive as compared with the country generally. Many years ago when I became familiar with the death statistics of the Isle of Wight Rural Sanitary District, I observed and reported that cases of cancer, consumption, and insanity occurred in the same families, and especially in families resident in the Island for many generations. Members of these families have frequently lived to extreme old age. In the ten years 1888-97 the average percentage of deaths from cancer in your district to all the deaths was 3.3. In the year under review the percentage of deaths from cancer was 3.1 above the average of your district, and 3.7 above the average of England and Wales. Many causes have operated, doubtless, in determining the presence among us in larger

proportion than in the country generally of families possessing a certain hereditary want of power in their members to resist particular influences. Among these causes which may still have their effect in old Island families is inter-marriage among kinsfolk at a time when the population was small, and communication with the mainland restricted. That the evils of such marriages were recognized during the last century and earlier is proved by the boast one sometimes hears from members of one or two ancient Isle of Wight families, that their progenitors never married relations. Other causes may be found in the food and habits of a people the great majority of whom were formerly agricultural peasants and fisher folk. But the main cause probably is that the salubrity of the climate, appreciated even in Roman times, has attracted consumptives whose families have settled here.

I have no means of obtaining the statistics of insanity, as some of the inmates of the Asylum are not Isle of Wight people, and many members of Island families who are of unsound mind are treated in mainland institutions; but neurotic affections are, I should judge, in excess. The position of phthisis or consumption is, however, readily ascertained. In the ten years 1888—97, the mean percentage of deaths from phthisis to all the deaths was 14·7. This is, of course, a very high percentage, being about 5·4 above the percentage of phthisis to the deaths from all causes in England and Wales; but many consumptives from a distance reside in the Isle of Wight, especially in the winter months, and a large number pass through the hospital at St. Lawrence. If the deaths among these strangers and the deaths among those drafted into the Workhouse from the urban districts of

the Island be deducted, the mean percentage of deaths from phthisis to all the deaths in your district is reduced to 8·4, which is one per cent. below that of England and Wales, and this, notwithstanding the fact, judging especially by the statistics of cancer, that, in a larger proportion than in the country generally, there are families in your district, the members of which have by heredity feebler power of resistance to certain influences, more particularly to the poison of consumption. For consumption is not an inherited vice which may manifest itself at any moment, but a disease caused by a living organism known as the tubercle bacillus, which is able to grow when it enters the bodies of some persons during periods of depression of health from any cause, because there has been handed down from generation to generation in the families to which they belong a constitutional weakness which declares itself in failure to inhibit the growth of the tubercle bacillus. A perfectly healthy man, whether he has inherited this weakness or not, is most likely quite immune to the poison of consumption; and before its source in this microbe was discovered, the disease was recognised as curable even by early Greek and Roman writers on medicine. Members of what are known as consumptive families who followed healthy pursuits, who lived in well drained districts, and who maintained a high standard of health, were seen to escape, and others who contracted the disease were found to get well if they always breathed perfectly pure air and adopted measures calculated to improve the general health. But since the existence of the micro-organism was ascertained, and its life history studied, the causes and prevention of consumption and its treatment have become well defined. Its causes are the causes which lower the general health, and the presence of the tubercle bacillus. Such

causes are unhealthy occupations and damp ill-drained and ill-ventilated dwellings, which are in large measure within the control of sanitary authorities; so also under control is the presence of the tubercle bacillus, which is conveyed into the body so largely by milk, the herbivora being particularly liable to infection by it. The milk becomes contaminated especially from tuberculous udders, and an Order has recently been made by the Local Government Board with reference to this. As public opinion becomes educated, sanitary authorities will, doubtless, be required to take further precautions which are observed in other countries, but neglected by us, against the spread of consumption by infection.

The whole subject must necessarily be of the deepest interest to you inasmuch as you exercise jurisdiction over nearly the whole area of a district in which the treatment of this fell disease may be pursued with as good prospect of success as is possible in these latitudes, and which is resorted to so largely for this purpose. At length the information possessed by those familiar with the teachings of medical science is becoming appreciated by the popular mind. The community are beginning to realize what the physicians of ancient civilizations as well as those of modern times have known, that consumption is a disease from which people may recover, and in a dim kind of way they are beginning to understand something of the scientific discoveries which have given to the medical profession such precise knowledge of this terrible scourge which so often baffles all the resources of their art. The public are, however, in the stage which is so dangerous. In the stage in which credulity is created, the stage in which nostrums are accepted without thought, and we hear everywhere of

the "new treatment," of the "open air treatment," of the "over feeding" treatment of consumption. None of these are new, they are "as old as the hills," and thirty years ago were being shouted in the deaf ears of many of those affected and likely to be affected. The fear at the present time is lest any of these methods of medical practice should be selected, and vaunted and quacked as cures, and fall into discredit as so many other legitimate methods in the treatment of disease have done, because they are applied in unsuitable cases, and that thus may be lost the advantages which accrue to the cases in the treatment of which they are suitable. The secret of immunity is the maintenance of a high standard of general health by the means which are calculated to maintain it; and when immunity is lost by a lowering of that standard, and disease comes, the method of combating it is to work back to the same high standard. What the people can do and have to do (they possess the power), is in the way of prophylaxis. They have to see that the tubercle bacillus is kept out of their bodies, they have to see that the sputum of the affected, which contains it, is destroyed, and they have to insist that the legislature and sanitary authorities they appoint shall prevent their being poisoned by the tubercle bacillus in the meat they eat and the milk they drink.



(A)

## Table of DEATHS during the Year 1898, in the ISLE OF WIGHT

NAMES OF LOCALITIES adopted for the purpose of these Statistics; public institutions being shown as separate localities.	MORTALITY FROM ALL CAUSES, AT SUBJOINED AGES.								I Smallpox.	2 Scarlatina.
	At all ages. (b)	Under 1 year. (c)	1 and under 5. (d)	5 and under 15. (e)	15 and under 25. (f)	25 and under 65. (g)	65 and upwards. (h)	(i)		
NEWPORT.	67	12	1	6	4	24	20	Under 5 5 upwds.		
WORKHOUSE.	59	2				17	40	Under 5 5 upwds.		
PARKHURST PRISON.	17					14	3	Under 5 5 upwds.		
PARKHURST BARRACKS.	7	2	1		1	3		Under 5 5 upwds.		
LUNATIC ASYLUM.	21				1	14	6	Under 5 5 upwds.		
COWES.	34	5	2	3	3	7	14	Under 5 5 upwds.		
RYDE.	18	5	2	1		2	8	Under 5 5 upwds.		
BRADING.	36	5	6	2	2	6	15	Under 5 5 upwds.		
GODSHILL.	57	10	9	1	1	12	24	Under 5 5 upwds.		
CONSUMPTION HOSPITAL.	16				4	12		Under 5 5 upwds.		
CALBOURNE.	89	20	3	4	2	30	30	Under 5 5 upwds.		
TOTALS ... ... ...	421	61	24	17	18	141	160	Under 5 5 upwds.		

The subjoined numbers have also to be taken into account in judging of the above records of mortality.

Deaths occurring outside the District among persons belonging thereto.								Under 5 5 upwds.
Deaths occurring within the District among persons not belonging thereto.	79	3				40	36	Under 5 5 upwds.

## Sanitary District, classified according to DISEASES, AGES, and LOCALITIES.

MORTALITY FROM SUBJOINED CAUSES, DISTINGUISHING DEATHS OF CHILDREN  
UNDER FIVE YEARS OF AGE.

4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	
FEVERS.																			
Group.	Typhus.	Enteric or Typhoid.	Continued.	Relapsing.	Puerperal.	Cholera.	Erysipelas.	Measles.	Whooping Cough.	Diarrhea and Dysentery.	Rheumatic Fever.	Phthisis.	Bronchitis, Pneumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Diseases.	Total.		
									2			2				9	13		
										10		7	8		1	27	54		
											1				1	2			
										5	5	11			36	57			
										2	3	3			2	7	17		
															3	3			
	I									I				I	I	4			
	I									4		I			15	21			
									3			I			3	7			
										I	3	2		2	18	27			
										I				I	6	7			
														I	6	11			
										I		3		I	5	10			
										2	3	1		I	19	26			
										I		5			11	19			
	I									3	4	I			29	38			
													15		I	16			
									2	I		2			17	23			
										3		6	7	8		41	66		
									2	3	5		15		I	54	84		
	2				I					3		50	32	37		8	200	337	
														I		2	3		
	I												21	4	8	I	41	76	

(B) Table of POPULATION, BIRTHS, AND OF NEW CASES OF INFECTIOUS during the year 1898, in the Isle of Wight Rural Sanitary

NAMES OF LOCALITIES adopted for the purpose of these Statistics; Public Institutions being shown as separate localities.	POPULATION AT ALL AGES.					
	Last Census.	Estimated to middle of 1898.	Registered Births.	Aged under 5 or over 5.	1	2
(a)	(b)	(c)	(d)	(e)	Smallpox.	Scarlatina.
NEWPORT.			128	Under 5 ..... 5 upwds.	.....	2 12
WORKHOUSE.				Under 5 ..... 5 upwds.	.....	
PARKHURST PRISON.				Under 5 ..... 5 upwds.	.....	
PARKHURST BARRACKS.				Under 5 ..... 5 upwds.	.....	4
LUNATIC ASYLUM.				Under 5 ..... 5 upwds.	.....	
COWES.			68	Under 5 ..... 5 upwds.	.....	4 13
RYDE.			55	Under 5 ..... 5 upwds.	.....	
BRADING.			77	Under 5 ..... 5 upwds.	.....	
GODSHILL.			93	Under 5 ..... 5 upwds.	.....	
CALBOURNE.			184	Under 5 ..... 5 upwds.	.....	1 5
TOTALS	...	...	29,747	28,750	605	Under 5 ..... 5 upwds.
						7 37

State here whether "Notification of Infectious Disease" is compulsory in the Diseases, insert in the columns with blank headings the names of any that are of the Isolation Hospital used by the sick of the District. Mark (H) the Locality is situated.—No Isolation Hospital.

NESS, coming to the knowledge of the Medical Officer of Health, District; classified according to DISEASES, AGES, and LOCALITIES.

NEW CASES OF SICKNESS IN EACH LOCALITY, COMING TO THE  
KNOWLEDGE OF THE MEDICAL OFFICER OF HEALTH.

## AREA AND POPULATION OF THE DISTRICT.

Area in Acres	85,814
Population (last Census)	29,747
(estimated to middle of 1897)	28,750
"	"

District - Yes. Since when: January 1<sup>st</sup>, 1890. Besides the above mentioned, notifiable in the District, and fill the column accordingly. State here the name in which such Hospital is situated; and if not within the District, state where it

## 2. THE SANITARY HISTORY OF THE YEAR.

Containing, as it necessarily must do, an account of the incidence of preventable disease, the sanitary history of the year not only affords means of testing the efficacy of the measures taken to prevent its spread, but also serves to indicate in some measure how far the circumstances upon which it depends are remediable in the district under consideration, and in the surrounding sanitary districts by which it is affected. Further, as the legal obligations of the medical officer of health compel him to report in the broadest sense upon the conditions affecting health in his district, regarding them with reference to the past and future as well as the present, the whole sanitary administration of the local authority must necessarily be brought under review. Reference to the sanitary legislation of the year, too, enters naturally into the history of a sanitary district affected by it, and it offers opportunity of judging the degree of earnestness with which the legislature have striven to secure the highest welfare of the people. The annual history of a sanitary district, therefore, should be of supreme interest to all concerned, and especially if it be such an important district as yours, in which the well-being of large numbers of visitors, who bring prosperity to its inhabitants, is concerned.

*Zymotic diseases.* During the year the principal zymotic or preventable diseases which appeared in your district were scarlatina, diphtheria, enteric fever, puerperal fever, erysipelas, measles, and whooping cough. Measles and whooping cough are not notified.

The epidemic of *measles* which commenced in 1895, died out in 1898. The disease was of a particularly severe type, but there were comparatively few deaths. It traversed the whole of the Isle of Wight, and was present in the Calbourne district at the beginning of 1898.

*Whooping Cough* prevailed in different parts of the district, and more particularly in Northwood, Wootton, Merstone, Blackwater, and Chillerton.

At the end of 1897, *scarlatina* was epidemic in Newport, and cases had occurred in your district among children attending Newport Schools, and the Parkhurst Board School, in which children of the urban and rural districts were associated. Early in January a young woman had scarlatina at Blackwater, after meeting at a party a woman from an infected house in Newport, and there was a case at Shide. The child attended the Newport Board School. About the same time, two young men who were working with men from Newport, had scarlatina in Miller's Lane, Carisbrooke. There was a case in the Infirmary Block at Parkhurst Prison early in January, the patient having sat next children convalescent from the disease at the Congregational Sunday School, the teachers of which lived in Newport. In the same month a case occurred in the family of one of the Prison surgeons, and there was another case in the same family in April. At the beginning of March a youth employed in Newport had the disease in the warders' quarters. At the end of January a child attending the Northwood Schools, had scarlatina at Marks' Corner, and three other members of the family were infected by her. There were no other cases in the school. The mother had visited an infected house in Newport; but children from

the Prison attended the Schools. On May 1st, three children living at Furzylhurst, Northwood, developed scarlatina. Two of them had attended the Northwood Schools on April 27th. One after the other, four more were infected in this family. In November, there was a case at Horsebridge Hill. Neither the child nor other members of the household had left the premises within any possible period of incubation, but the child was frequently in a shop which tramps visited on their way from Cowes to Newport, or *vice versa*. Two soldiers were admitted into the Parkhurst Barracks Hospital, who had scarlatina, one in February, the other in March. They belonged to the same Company but not the same room. Two other cases were admitted in November. They had in common that they followed one another from the barracks prison cells, but there had been cases among the members of the guard at East Cowes in August, who did not return to barracks until they were supposed to be convalescent. A woman living at Vittlefields helped to nurse relations in Newport suffering from scarlatina. One of her children developed the disease soon after she returned to her home at the end of January, and the woman herself and three other children had scarlatina a few days after. At the beginning of February, there were two cases of the disease at the Newtown Coast Guard Station, the patients being pupils at the Lock's Green Schools; and there were two cases at Lower Watchingwell about the same time. At the end of February, there were six cases in another family at Newtown, to which attention was not called. The earlier cases appeared to be connected with a concert given at Newtown. An isolated case of the disease occurred at Brooke, in April; and in September a child appeared to be desquemating at Sheepwash, Freshwater, but it was not clear that it was the result of scarlatina.

In February there was a case at Binstead among the pupils of the Infant School, which developed after visiting a dyer's shop in Ryde. The case of a naval sailor visiting Binstead was notified at the end of March, but he was evidently desquemating from the disease at the time he arrived from Portsmouth. An isolated case at Haven Street was notified in January. It was that of a youth employed in Ryde.

In September, a prison warder's son, a pupil at the Newport National Schools, died from *diphtheria*. Three days before feverish symptoms developed he visited Southampton. In November, a child died of the disease at the Werrar brickfield, and a case at the Cement Mills was notified in the Northwood district. In the former case the child attended the Northwood Schools, and in the latter the child had visited Newport about the time her mother returned from Landport with a bad throat. There was communication between the houses, but the case at Werrar began to develop at the time the woman at the Cement Mills returned home; and there seemed to be no connection between the cases. In December, 1897, there was a sharp outbreak of *diphtheria* among the pupils of the British Schools at Niton, a gault village. The schools were closed, and as there were no fresh cases consent was given under considerable pressure, to their re-opening at the end of a month or five weeks. In less than a fortnight there were two fresh cases in the infants' class and both died. Unfortunately the relatives of one of them could not be dissuaded from attending her funeral and of the six cases notified subsequently five occurred among the members of this particular family. At the same time, early in February, a boy at Blackgang developed the disease after visiting

Niton. At the end of December a case at Whitwell, another clay village, was notified. In February a case occurred in a thatched stone farmhouse—Batchelors farm—near Whiteley Bank, in which there had been cases in previous years; and in May there was a case in a cottage at Cockrells, Newchurch, in which the disease had appeared before. In August, two cases occurred at Knighton. They were cousins of the previous case, and the disease developed after visiting their friends at Cockrells. A case died in a semi-detached cottage at Haven Street in November, and in December a child had diphtheria in the other cottage after wearing a garment belonging to the deceased which had not been disinfected. At the end of September and beginning of October there was a severe epidemic of diphtheria among the children attending the Calbourne Schools. Cases of throat affection had been treated but their nature was not recognised. After this was pointed out, twelve cases were notified in Calbourne, but there had been many more. The children of Newbridge attended school, some at Calbourne and a few at Ningwood. There had been many throat cases at Newbridge, the majority of which did not receive medical attention, but after the character of the affection was known five notifications were received. A case died at Ningwood, the poison having been received, probably from a Newbridge child attending the Ningwood school, unfortunately when the schools were closed the Sunday School at Newbridge was overlooked, and a child at Fivehouses, who evidently contracted the disease there, was severely ill with it.

In April, an inmate died from *enteric fever* in the Asylum at Whitecroft; and in August there was a case among the convicts at Parkhurst Prison. In neither case

was the source of the poison clear; but there had been cases of enteric fever at the Asylum during the previous year, and the convict had been working at the sewage works at Parkhurst. On September 21st, a soldier, married off the strength of the regiment and living in Newport, was admitted into the Station Hospital, at Parkhurst Barracks. On Sept. 9th, enteric fever was diagnosed. From August 16th to the 28th he was in camp at Browndown, Gosport, —which is supplied from the Gosport Waterworks, Alverstoke—where, probably, the poison was taken. On October 5th another soldier was admitted apparently suffering from ague. He had come to Parkhurst from Browndown at the end of July, and had passed his time in Newport, when not in barracks, from that time, excepting on October 1st when he visited Cowes. In October a case of the disease at Whitwell was notified. There had been a case of slight illness with feverish symptoms in the same family in the summer, but the medical attendant was unable to make a diagnosis satisfactory to himself. In the light of the second case he thought it may have been mild enteric fever. The only possible source of the poison on the premises apparently, was an insanitary privy. In August there was a case of enteric fever in a lodging house at Freshwater Bay. The patient nursed a lodger who had come to the Island for change during convalescence from enteric fever. She evidently had a mild relapse. In October, the lodging-house keeper's daughter, who nursed her mother, had the disease. In August a letter came from the Medical Officer of Health of Oxfordshire stating that a death from enteric fever had occurred in that county in the case of a patient who had resided in a lodging house at Freshwater Bay, from the 18th to the 26th of July. Upon making enquiries I found he was ill when he arrived at Fresh-

water, and as he died on August 5th I concluded the disease was not contracted there. But the house was insanitary. The soil pipe of the closet passed down within the house, and the small supply cistern was filled from the watermain by means of a hose pipe attached each morning. At the time of my visit the sewage cart was emptying a cesspit close to the house with very malodorous results disagreeably perceptible in every room in the house, which was full of lodgers.

A case of *puerperal fever* died in January in a very insanitary house without water supply, at Redhill Lane, Whitwell. The Whitwell supply at Southford has not been carried to this cottage.

Nine cases of idiopathic *erysipelas* were notified during the year.

Whatever may have been the shortcomings of the sanitary administration of the Isle of Wight Rural District in the past, its Sanitary Authority were sufficiently enlightened to place it under the protection of the law for the compulsory notification of infectious diseases, on the first of January, 1890—the day upon which the permissible enactment came into operation in England and Wales. Uninformed as the mass of the people are about the laws of health, and unable to appreciate, therefore, the direction in which their best interests lie, they are in danger of falling victims to the ignorance of blatant fadism. Under these circumstances, the permissive sanitary legislation, favoured by the legislature of this country, is nothing less than a selfish dereliction of duty, for which the exigencies of party polities are no excuse. To say there is no popular demand for sanitary reform is a weak trifling with the obligations of a sacred trust. It is chiefly due to the exertions of the members of the profession to which I

Compulsory  
notification of  
infectious dis-  
eases.

have the honour to belong that so large a majority of the population are protected by notification ; but, even now, their earnest representations are of no avail in some districts. For five years your own district suffered grievously, and was in constant danger because sections of the population outside it were unprotected. In my last Annual Report, I made reference to the notification of erysipelas, and said, if something else than idiopathic erysipelas is intended by the Act, it should be defined. During the year, only nine cases were notified, and in the previous year, but nine. It is within my knowledge that these numbers are wholly misleading with reference to the incidence of this disease in your district. You adopted the recommendations of the Special Committee appointed to read and report upon my Annual Report for 1897. One of these was to the effect that when the Medical Officer of Health reported the prevalence of measles or whooping cough in particular districts, the Council should render measles and whooping cough notifiable diseases for the time being in those districts. I think your Committee could scarcely have grasped the object of my suggestion to make measles notifiable in your district, which was that the existence of measles may be known to your Officer. The intention of notification is to inform the Medical Officer of Health as early as possible of the existence of infectious diseases, in order that he may take measures to prevent its spread. When it prevails in a district, there are so many foci of infection, it is impossible to do much beyond closing the schools forthwith. Unless a death occurs, the Medical Officer of Health is not likely to know of the presence of measles or whooping cough until a large number of children have become infected, when the schoolmasters or managers request him to recommend the closure of

the schools, because of the dwindling attendances, in order that the grant may not be jeopardised.

But another recommendation of your Committee, if attended to by schoolmasters, will meet the case—"That forms and wrappers be issued to every master of a public elementary school for the purpose of enabling him to notify to the Medical Officer of Health the absence of any child from school because of scarlatina, diphtheria, measles, whooping cough, or chicken pox." These forms have already been issued I believe.

As knowledge increases, and the true principles of government are grasped by the nation, amateurism in sanitary matters will disappear, and the notification of other diseases will be enforced. Then, the annual premium on insurance against disease will be as wisely and willingly paid as the premium in armaments is now paid to secure imperial safety. Then, the enormous wealth in human life will be conserved, which is now wasted because of ignorance, prejudice, and selfishness.

#### Isolation.

But to know where preventable diseases exist is important only in the opportunity afforded of limiting its operation. There is no utility in the knowledge that a fire is consuming a house, and that adjoining houses are in danger, if nothing is done to quench it. To gaze at it burning itself out is as if a sanitary authority were to watch an outbreak of infectious disease without closing the schools. The necessity of isolating a patient suffering from a communicable disorder is obvious. The poison passing from his body must be prevented from passing into the body of another. But the practical difficulties in the way of securing efficient isolation in the houses of the majority of the inhabitants of your

district are enormous, and are only realized by those whose duty it is to visit the homes of the people. That so much is done reflects the greatest credit upon the poor, whose patient sacrifices are permitted to pass with no recognition by the sentimentalism which prates about their wrongs. In every parish of your district, material assistance is given, and, as far as can be, comfort is afforded in time of stress by the clergy and kind-hearted neighbours; but the very nature of the case precludes the possibility of the kind of ministration most needed, and of maintaining isolation at the same time.

The ideal method of dealing with a poison which threatens the well-being of the community is to take it right away or to destroy it. In the case of an affected person a place must be provided for his reception. When one thinks of the money cost of disease, when one thinks of the material loss occasioned to any community by an epidemic, say of scarlatina or diphtheria, one wonders upon what principle the provision of such a place is resisted. A prudent man insures his property against the risk of fire, and is careful to pay the premium before the policy runs out, lest he should remain unprotected a single day; and a prudent community should willingly pay the annual premium of insurance against the risk of any form of disease. Some twenty years or more ago your predecessors were so impressed with the necessity of making provision for isolating cases of infectious disease that they purchased a hospital tent, which they subsequently sold to the Board of Guardians, and then they re-purchased it. In 1887 or 1888 they resolved that provision of a more permanent character should be made for the isolation of cases of infectious disease. A committee appointed to ascertain the cost of making such

Isolation Hospital.

more permanent provision, reported it would not be less than £2,000 or £3,000. It was then resolved to negotiate with the urban authorities with a view to the provision of an isolation hospital for the Isle of Wight generally. I need not repeat the dreary history of the negotiations which followed, and of the selfishness manifested by those with whom your predecessors and you negotiated, ending at last with an act of bad faith which appropriated for purposes of isolation £22,710 of your rateable value, a penny rate on which would have repaid a loan of £2,000. But it is of great importance, for it was the prelude of what was to follow, in the extraordinary antagonism of a few men to your district which has set town against country, the results of which must prove disastrous to the sanitary interests it is your duty to safeguard, and to the prosperity of the whole of the Isle of Wight.

When all hope of co-operation with the urban authorities disappeared you resolved to establish an isolation hospital for your district alone, and you appointed a committee to elaborate a scheme. After spending much time in visiting locations recommended, and after advertising for suitable land without result, the committee proceeded in a business like manner to do properly the work allotted them. They first considered in what position the hospital should be placed in order that the necessities of the whole of your district might be best met. They naturally chose its geographical centre at Whitecroft. They visited it and selected several suitable sites there; and made applications to the various owners for three acres of land. They all declined to sell so small a lot, but one of them offered an outlying meadow of nearly three acres for £500. It was in every way desirable, and you accepted the offer subject to consent. This

site close to the highway was easy of access, it had a porous subsoil, there was in its immediate neighbourhood means of obtaining an independent water supply from the Upper Greensand, and it was sufficiently sheltered. Its only drawback was that it was of oblong instead of square shape. Plans were prepared and submitted and all the requirements of the Local Government Board were met. An Inquiry was held, and it was found the only opposition was that raised by the Asylum Committee of the County Council because the proposed site was only a quarter of a mile from the Asylum. Everyone seemed to think that as the presence of the Asylum had depreciated values in the neighbourhood, this was the very best district in the Isle of Wight in which to place the hospital having regard to the universal sentiment about isolation hospitals. As a result of the Local Government Board Inquiry consent was given to borrow between £3000 and £4000, the Local Government Board requiring that the usual undertaking not to isolate small-pox in the hospital should be given. Advantage was taken of this requirement to get rid of the scheme, a resolution to abandon the site being passed by a narrow majority. The reasons given for adopting this course were that an isolation hospital was not needed; that small-pox was the only disease requiring isolation; that the scheme was too expensive; and that the hospital would be too near the Asylum. This latter reason seemed to appeal to the members of the County Council who were members of your Authority, all of whom voted for the resolution. So, after the site had been purchased as far as it could be, and the plans and estimates had been approved by resolution, and after a large amount of time had been expended and money spent, the opportunity of meeting suitably a sanitary requirement

was thrown away. Then, another Isolation Hospital Committee, members of which had a particular site in view, was appointed. A small sub-committee recommended the committee to visit this site on the summit of Alvington Down, Carisbrooke. They were charmed by the view, and their report in its favour was adopted almost with enthusiasm by your Council. Local opposition was so strong and unanimous however, and was so widely endorsed by public opinion generally, that a resolution to relinquish the Alvington Down site was only defeated by a bare majority. Several alternative sites, more or less inappropriate and fanciful were then suggested—apparently without thought of the necessities of the case or the object for which a site was needed—some of which were considered by the former committee. You have now applied to the Local Government Board for sanction to borrow the £600 you have agreed to pay for three acres of land on Alvington Down, a site for a small-pox hospital, and the right to make roads and to pump water from the valley. The strong opposition to the site chosen is confessedly grounded upon sentiment, but one can scarcely understand why the sentiment evidenced by the people of the neighbourhood—who fear the effect of the sentiment of the public upon their material interests--should be ridiculed when the sentiment with respect to an isolation hospital is so strongly pronounced in your Council and in the County Council. Since the subject has been under consideration by your predecessors and you a strong desire has been manifested by many members of the Sanitary Authority to place the hospital out of the way somewhere, preferably on the top of a down. The Asylum Committee of the County Council strongly opposed your effort to place a hospital a quarter of a mile from the Asylum, an opposition

which had the sympathies of a large number of the members of the County Council itself, one of the most prominent of whom was reported to have described it as a nuisance. The truth is, that—absurd though it may be, and it is absurd to those who are well informed on the subject—this strong prejudice against isolation hospitals is shared by the educated and illiterate, unequally perhaps, for the educated classes appear to have the greatest dread of them. From my experience as a medical man, I should judge there are very few persons, at least in the Isle of Wight and among the members of its governing bodies, who would willingly consent for the public good to the erection of an isolation hospital near their dwellings. If, therefore, you are going to use the *force majeure* with which we have become familiar in the Isle of Wight during recent years, and to act in defiance of the unanimous opinion of a whole parish, which it has been your boast you never do, you may as well choose, in the interest of the community generally, a convenient site—if it must be at Carisbrooke—with a good water supply, such as the field south of the Infant School, on the Clatterford Road, or the field opposite it, or in the Priory fields. Apart from sentiment, it may as well be in either position as on the summit of the down, and as regards the esthetic sense, it would be less in evidence, and would not blur the landscape if placed on either of these sites.

My opinion was not required, and the site was chosen without reference to me, but it is no less my duty to report to you upon it. As I have already said, the object of an isolation hospital is that a poison which endangers the health of the community may be separated from it quickly, and removed to a place as convenient as possible

until risk from it has ceased. This place should, of course, be readily accessible. As the poison exists in the body of a human being, who is removed from his home and friends for the benefit of the community, the place in which he is isolated ought to be provided with every comfort, and must be free from any drawback in order that, as the guest of the community his well-being may suffer no detriment or prejudice. It should not, therefore, be situated upon the summit of a wind-swept hill, exposed to the gales from every quarter of a breezy island, where you would not build a private dwelling. The site you have chosen is removed from the centre of your district, and is less readily accessible from all parts than it ought to be. In itself, the position is difficult of access, and—situated as it is at one of the most elevated spots in the Isle of Wight, fully exposed to storms from every quarter—it is, in my opinion, altogether unsuited for the site of a building in which to treat disease. A nervous subject suffering from enteric fever, for example, would certainly be prejudiced as regards recovery, if treated in a small building so situated. The question of cost is a serious one. The principal approach would be by Nodgham Lane—in its present state, one of the most picturesque and charming in the Island—which must be widened and metalled, and made into a good road, and destroyed as an attraction to visitors. In spite of what has been said to the contrary, the approach from the Calbourne Road would require a good and well-metalled road of considerable length. When your Committee visited the spot, they found they could not drive to it. I will not refer to the expense of the small waterworks you propose to establish, as you would probably find it more economical to construct large rain water tanks for water supply. To comply with the minimum require-

ments of the Local Government Board, to commence with—which would have involved an expenditure of £3,000 at Whitecroft—you must spend a great deal more than £3,000, having regard to the additional cost of haulage of building material. I do not suggest that £3,000 is at all an extravagant price to pay for an isolation hospital in such a district as yours, but I remember more than one member of your Council stated as his reason for voting to abandon the Whitecroft site—which was to have cost £500—that the scheme involving an expenditure of £3,500 was too expensive. As regards sentiment, I may here remind you that members of your Council claimed that the Alvington Down site was superior to that at Whitecroft because the latter was near the high road. As a commentary upon this objection I would point out to you that you have sanctioned plans for the isolation hospital of Sandown and Shanklin, which is to be built close to one of the main highways of your district the traffic on which must be at least four times that on the highway past Whitecroft—without a word of protest.

The suggestion has been made that if an unoccupied house and one not likely to let can be found near the centre of your district it may be rented by you for isolation purposes. Such a house could be found only in the neighbourhood of the Asylum, the presence of which would be likely to bar the occupation of any substantial house by persons of sufficient means to take it. But probably the same kind of sentimental objections would influence an owner to refuse to permit a house of his to be used for the isolation of cases of infectious diseases; and the Asylum Committee would protest.

One of the reasons given for recommending the Alvington Down site is that it would provide means of isolating small-pox, and you propose to purchase a piece of land for the purpose of a small-pox hospital which is said to be situated a quarter of a mile from the proposed site of the isolation hospital and of any other building. I have not measured the distances. The site will be of no service should a case of small-pox occur if there is no building upon it. If there is a building an administration block will be required. You will not be permitted to administer the small-pox hospital from the isolation hospital. Small-pox has been introduced into your district only twice in sixteen years. Should it be introduced into the Island in the future a disastrous epidemic may result unless in the meantime the legislature should make secondary vaccination compulsory. But the towns will suffer far more than your district, and they should make provision first. Moreover, you have never been asked to provide for the isolation of small-pox. The opinion of the civilised world is that the best provision against small-pox is universal vaccination and re-vaccination; but under present circumstances the isolation of small-pox in the Isle of Wight should most certainly be provided for, but that provision should be made by all the ratepayers of the Island, acting together for the common good.

During the year, application was made to me by the Military Authorities, with reference to the isolation of infectious disease occurring in the military establishments in your district. As these are rated, and as all cases of infectious disease are notified to me, I assume the claim to be placed in the same category as other ratepayers is a valid one. It is very difficult to isolate

cases of scarlatina and diphtheria occurring in the families of the soldiers residing in Parkhurst Barracks and in the Forts. It is undesirable, if not contrary to discipline, that children should be sent to the Station Hospital, and you are as interested in preventing the spread of infectious diseases in these establishments as in private houses. Sanitary authorities have complained that government establishments were outside their jurisdiction in sanitary matters, and it seems only right, and in accordance with good policy to afford every facility to the Military Authorities for dealing with these diseases, now that local rates are paid, and the control of the Sanitary Authority is recognised. Should you ever possess an isolation hospital, therefore, it would be properly available for the military as well as the civil portion of the population. I think I am correct in saying the Admiralty do not recognise the Sanitary Authority. Although I have never been refused access to the Coastguard Stations, and although I have always been treated with the utmost courtesy, and every information has been afforded me, I have been given to understand the only authority recognised was that of the Chief Officer at Portsmouth.

The absence of recurrent cases of infectious disease in <sup>Disinfection.</sup> your district is evidence of the care with which disinfection is carried out by your inspectors, and of the efficiency of the germicide employed—sulphurous acid gas. I am aware of the want of confidence expressed by some in this means of destroying the poisons which produce zymotic diseases; but I have seen no reason yet to change the methods which have so far proved successful here. You do not possess a disinfecting apparatus at present. In communicating with the Military

Authorities, I found the War Office Order requires disinfection of clothing and bedding by heat, and the practice has been to send the infected articles to the mainland for this purpose. I have undertaken that any disinfection required shall be done by your officers, by the means usually adopted, upon application being made; and I have advised that if the Order be insisted upon, the infected things should be *destroyed* by heat on the spot, as a matter of economy, and as affording greater security to the public health.

Spread of  
Infectious  
Diseases at  
Schools and  
Closure of  
Schools by the  
Sanitary  
Authority.

Sixteen years' experience in your district has taught me that in the absence of an isolation hospital, the only effectual means of checking an outbreak of infectious disease is to close the schools, and this course is always taken. The aloofness of the different public bodies in local government is characteristic of the day. Instead of working together harmoniously for the common good, there would appear to be a disposition to ignore or belittle other bodies, to deny the authority they possess, and to resent its exercise; while, perhaps, there is a tendency on the part of majorities to exercise power arbitrarily. In connection with the closing of Board Schools during the prevalence of communicable diseases there have been difficulties of late which did not exist formerly. In some instances, there has been an unwillingness to close schools, the School Board claiming to judge of the circumstances; in other instances, there has been almost an insistence that the closed schools should be re-opened by a given date. I will say nothing about the undignified and unedifying appeals to an ignorant electorate, the coarse vituperation of individuals, and the dishonest suggestions and insinuations of partiality and worse; they are

beneath contempt. But there may be a suspicion of arbitrariness in the minds of well-meaning men who do not take the trouble to enquire into the circumstances of the case, and who do not study the Education Code, when the closure of schools is prolonged. There were three examples of prolonged closure of public elementary schools in your district during the year 1898. At Niton, the two voluntary schools were closed before Christmas, 1897, on account of an outbreak of diphtheria. Unfortunately the desire to re-open them after the holidays was reluctantly yielded to. The disease again appeared, and deaths occurred; the schools were again closed, and they remained closed for a much longer period than was necessary, because both the school authorities and the inhabitants were scared. At Chillerton, one of the schools of the Carisbrooke School Board was closed by request, as few children were in attendance on account of the prevalence of whooping cough. The school district is wide and the population scattered, and as in the outskirts children were attending schools in other parishes in which the disease did not exist, it was thought wise to prolong the closure, especially as the weather was severe. Probably lives were saved, and certainly the finances of the Board were benefitted; but it was considered a grievance. Sanitary authorities have their duty to perform, and it is their business to safeguard the health of their districts. Your attention was not concentrated upon the public health in the Chillerton School District, but extended to that of the areas beyond it. The third schools closed for some months (on account of the prevalence of scarlatina) were the Parkhurst Schools of the Carisbrooke School Board. They are border schools, that is to say, they are placed just on the boundary of the borough of Newport. These border

schools are the most difficult to deal with in the presence of infectious diseases, because in a sanitary sense they are the portals of your district. Your action respecting them must necessarily be determined by the action of the urban authorities. If the schools are closed in the town, the rural border school, frequented by both town and country children, need not be closed for a lengthened period, as the epidemic quickly subsides. But if the town schools remain open, as was the case in Newport, the epidemic is of prolonged duration, as the disease slowly burns itself out, so to speak, and the border school must remain closed for a lengthened period if the health of your district is to be safeguarded. You have always sanctioned very willingly the measures taken to prevent the spread of disease, and by so doing you have acted wisely. In sixteen years there has never been the slightest abuse of your power to close schools, and the best proof of this is that the appeals of the managers of schools in your district to the Education Department against closure have never been successful. The Education Code orders managers of public elementary schools to close them when requested by the sanitary authority, under the advice of their medical officer of health, on account of the presence of infectious disease; but the managers have the right of appeal to the Education Department. The financial interests of the schools are fully protected by the Code. With the certificate of the Medical Officer of Health the school is credited with the average attendance of the year for the grant during the period it was closed by Authority. The Education Department goes farther than this under clause 87\*, I think it is. If the school be not closed any child detained at home is credited with his or her average attendance during the period of detention, upon the production of

the certificate of the Medical Officer of Health. But the difficulty rests with the rural border schools. The Education Department will not approve plans of new schools having the air space per child laid down in the Code, which is absurdly insufficient. School Boards, intent upon rate saving in this respect, admit town children into their border schools until the schools are crowded up to the Code air space limit. As they often pay the salaries of the school masters and mistresses by giving them a certain proportion of the grant, it is to their interest to get as many children as possible into their schools. If the schools are closed by the Sanitary Authority they are apparently uninjured, for they share in the credited average; but in reality they are, for if the town schools remain open the town children go back to them, and do not return at once to the rural school when it is re-opened. From the sanitary standpoint the whole question is a very important and serious one. The only way of meeting it would appear to be by an alteration in air space laid down in the Code to at least 250 or 300 cubic feet per child. 400 cubic feet would not be too much.

During the year under review, the public elementary schools and the Sabbath schools in your district were closed at Whitwell, Niton, Chale, Calbourne, Ningwood, and Haven Street, on account of the presence of diphtheria; at Northwood and Lock's Green, on account of the presence of measles; at Chillerton, on account of the presence of whooping cough; and at Parkhurst and Northwood, on account of the presence of scarlatina.

A step in sanitary progress was taken when it was ~~scavenging~~ resolved to scavenge the more populous places in your

district, for although there may be sufficient garden ground in many of the large villages to admit of the safe disposal of house refuse, it is too often permitted to accumulate near the dwelling: and experience has shown that the powers of resistance to certain zymotic poisons are feeble in persons occupying such dwellings. There was much opposition in the places proposed to be benefitted, the usual objections being urged; but you now scavenge Bembridge, Brading, Carisbrooke, Yarmouth, Freshwater, and Totland Bay. Where sewers exist, there are a few houses not connected with them, which drain into cesspits, as at Brading and Bembridge, and a charge is made for emptying them. It is proposed to adopt the same plan at Yarmouth. This appears, on the face of it, scarcely fair, unless the owners refuse to connect with the sewer, as all contribute to the cost and maintenance of the sewer. For example, a pledge was given to sewer Yarbridge, a part of Brading, which has paid the sewer rate for many years. It is the duty of the Sanitary Authority to provide sewers for people to drain into, and if a less expensive system of sewerage is adopted, the sewer not being laid deep enough to drain all the houses, the least that can be done is to empty the cesspits of those houses. It is said the charge is willingly paid, but it seems rather mean of the ratepayers to impose an additional toll upon a few of their number. At Carisbrooke, all cesspits are emptied by pumping into an iron sewage cart, and at Freshwater, they are emptied by means of a Merryweather's cart—a sanitary method of scavenging cesspits—within a certain area, beyond which a charge is made. The question of the removal of house refuse at Freshwater and Carisbrooke, when they are sewered, has been raised. It is urged that the parish generally has to contribute to the sewer in the

village, of which the majority cannot make use, and that they should not be called upon to help to scavenge it. Both Freshwater and Carisbrooke will require to be scavenged after they are sewered, as are Bembridge, Brading, Yarmouth, and Totland Bay. One cannot but sympathise with rural ratepayers in the present depressed state of British agriculture, and having regard to the annexation of rural rateable values to the towns; but the law which makes the parish the contributory place is binding, and it must not be forgotten that the only means of redressing the incidence of agricultural rating as the law stands, is by the growth of semi-urban areas in the different parishes. It is said that if these areas are separated from the parish, it has not the responsibility of them, and the burden this involves. That is so, but apart from the highway and poor rates, the contributions are parochial, and in many parishes the increasing rateable value of growing places which require loans for sanitary purposes is far more than ample compensation for the annual payment they involve. But the higher and broader consideration is that an insanitary area in a parish is a risk to the health of the whole parish, and any contribution necessary to render it sanitary is a well-spent premium on health insurance. The scavenging contracts are let by tender, and the tenders are submitted to the parochial committees of the respective parishes, and their recommendations are adopted—a convenient arrangement, as local knowledge of the would-be contractors is made available, and the responsibility of seeing that the contracts are properly carried out, which is thrown upon the members of the committees, is of assistance to the inspector, who, as your officer, is responsible to you, upon whom the ultimate responsibility rests. There are other populous places in your

district which should be scavenged, as Binstead, Wootton, Gurnard, Niton, Wroxall, Bonchurch, and presently, Fairlee. Wroxall, perhaps, needs it most. Since it has possessed an independent water supply, land has become more valuable there, and the curtilages of new houses are rapidly diminishing, and the convenient disposal of house refuse on the premises is becoming more difficult.

The Refuse of  
the Towns.

No town in the Isle of Wight destroys its refuse by artificial heat ; hence as regards some five tenths of the Island population and as regards other three tenths—that of the places you scavenge—the refuse is deposited in your district. The results have been great nuisance and no little danger to the public health. Since your bye-laws have regulated the deposit of refuse the nuisance has been a diminishing one especially since the Authorities of the towns have adopted your suggestion to give you assistance by means of clauses inserted in their scavenging contracts. One of the worst features connected with refuse deposit remaining, is the fact that pigs and cows are turned on to the heaps to eat the garbage. If you have power to prevent this I think you should exercise it. You wisely adopted the resolution of your special committee appointed to report upon the annual report of the Medical Officer of Health that the scavenging contracts in your district shall in future contain a clause requiring the use of covered carts by the contractors. It also decided to represent to the Councils of the towns the desirability of adopting similar regulations. In some of the towns covered carts are already used.

Sewerage and  
Water Supply.

Although progress is somewhat deliberate, you are realising year by year more perfectly your obligations in respect of the provision of sewers for people to drain into

and of independent water supplies. No year passes now without some permanent advance in these forms of sanitation. There are many difficulties to surmount in making such provisions, which are not met with in the more homogeneous and compact urban districts; and I would venture to point out to your critics that it is not so long since the towns they represent were in worse case as regards sanitation than the rural places of which they complain. Indeed, it has been your duty to call attention from time to time to urban defects which were a danger to your district and some of which continue. But the bad treatment you receive and the unfair and partisan statements of your judges while they justify retaliation, do not relieve you in the slightest degree from the necessity of advancing those measures of sanitation which are incumbent upon you under the law.

Of these the provision of sewers in places furnished *sewers.* with independent water supplies is becoming constantly more pressing. Villages which are already assuming the character of embryo towns and which are destined to become important watering places as they are called, and places of health resort, are being prejudiced commercially by defects remediable only by means of sewers; while the sanitary aspect of several of the more rural villages would be greatly improved by regular systems of sewerage in lieu of the open and closed drains which have been made use of to meet the drainage difficulties of particular houses. You devoted considerable time and attention to the question of the sewerage in places possessing water supplies, the provision of which should always precede the making of sewers. Some of the plans you have discussed have been some years in contemplation, but the work when carried out is no less useful on

this account provided it is done by competent persons, and the sewers are laid at sufficient depth for the purpose for which they are intended. The experience of public sanitary engineering in your district has not been fortunate, to say the least, and possibly some of the most satisfactory of your sanitary work has been that designed and carried out by your own Inspectors : indeed, I have never seen presented either to you or your predecessors a more creditable scheme of sewerage than that for the extension of the Wootton sewer designed by the East Medeue Inspector assisted by his colleague. Probably the errors committed in the past have been due in great measure to want of information on the part of the Sanitary Authority, the prevalent idea being, apparently, that the construction of a sewer merely meant the laying of a long drain.

Discharge of  
Sewage.

As you proceed in the future to fulfil your duties to the populations, whose sanitary protection is confided to you by the State, you will meet with some of those difficulties to which I have referred in increasing measure, more particularly in connection with the provision of sewers in inland places, the discharge and disposal of their contents without nuisance will be a problem not easy of solution by methods hitherto in vogue. Fortunately in her search after truth, science is elucidating the laws which control the operations of nature, and is constantly producing the new facts which make epochs. The recognition of the existence of minute organisms, and the study of their functions, have revolutionized within a decade our views upon many subjects. It is impossible almost to convey in popular language a correct appreciation of the operations of these micro-organisms ; but for the purpose before us, certain of them may be divided

into two classes—one maleficent, the other beneficent. The former are called anaerobic, because they flourish in the absence of light and air; the other are known as aerobic, because they flourish in the presence of light and air. They are on the border-line between the animal and vegetable kingdoms, but they are classed with the latter. By their agency, organic bodies are reduced to their elements. You have had brought to your notice since my last annual report was written, more prominently than before, what is known as the septic treatment of sewage, in connection with your sewerage difficulties at Freshwater, and not being able to readily comprehend it, you are naturally, and very properly, cautious respecting it. This system is the adaptation of the processes of Nature in the disintegration of organic matter to its destruction in sewage—that is to say, to the breaking up into its elements and completely changing the form of that kind of organic matter which constitutes sewage. In order to do this, the sewage is discharged into covered tanks, from which air and light are excluded, in which it is acted upon by anaerobic microbes, the action of which, in this instance, is beneficent, for, in their growth, they break up the sewage and change its character. Thus changed, it passes out of the closed tank into the air and sunlight, where it is acted upon and further changed by the aerobic microbes. It matters little whether this patent apparatus or that is used, the principle is the same. The sewage ceases to be sewage under the influence of these two classes of microbes, and if the adaptations ensure their full action upon every particle of sewage, what flows away—the effluent as it is called—is without palpable nuisance or danger, and can be passed into a watercourse without polluting it. This is the desideratum, and this will be achieved if it be not

already accomplished, as it is said to be. I fear my description would scarcely satisfy a scientific mind, and I may not have made myself clear to you; but if what I have endeavoured to describe can be secured, you will see the problem of sewage disposal in places like Wroxall and Niton and Haven Street, for example, solved.

**Haylands Sewer.** The story of the now notorious Haylands sewer has been told and re-told so many times, it is scarcely worth while to repeat facts which must be familiar to you; but the subject is perennial, as the Local Government Board continue to remind you of their requirements. It has been supposed by members of your Council that the Central Authority were in some way responsible in the matter, and it is my duty to admit I was myself misled by those who were in fault. It is certain the sewer, as it exists, does not correspond with the plans sanctioned—that, in fact, the sewer, during construction, was carried to a point at a higher level than that of the Ryde sewer, which it was to join. Early in the year, the Local Government Board again called upon you to re-lay the sewer. At the request of the Ashley Parochial Committee, you asked for sanction to a loan for fifty years for that purpose. This was refused, and as the rateable value of the parish does not admit of the necessary expenditure being made in one year, and as sanction to charge the whole of your district with the cost—which would be equitable—would be illegal, the matter is once more in abeyance. In the meantime, the 9-inch sewer has continued to work, notwithstanding the fact that the almost level portion of it has only 4½-inch outlet. It was hoped that the volume of the School Lane sewage would secure the emptying of this part of the sewer by means of the penstock your predecessors placed at the bottom of Salter's Road; but as

the Justices refused to grant an Order to compel the connection of the School Lane houses, this volume is insufficient. You proposed to connect these houses at the cost of the parish, but the Parochial Committee objected, and suggested your object may be attained by automatic flushing, which your predecessors would have supplied, could they have obtained water. You made application to the Ryde Corporation for the necessary water, but they again declined to furnish it.

The row of cottages, south of Mitchell's road, on the Upton Road  
Sewer. east side of the Upton road, Haylands, are drained at their back by an old brick-on-edge sewer, practically on the surface, which connects with the Mitchell's road sewer. When this district was developed before the passing of the Public Health Act (1875), very little sanitary supervision was exercised, and the houses were drained free from control, into badly constructed sewers carried across private land to connect with the Ryde system. Many years ago an outbreak of diphtheria in these Upton road cottages caused your predecessors to take action, but nothing came of it. From time to time the matter was taken up again by them, and latterly by your Council. The Ryde and then the Ashley Parochial Committee objected to the drain being reconstructed at the cost of the parish, but at length plans were ordered by you at the suggestion of the Parochial Committee, and approved by them, to lay a proper pipe drain at the backs of the houses, and you applied for sanction to borrow £150 for this purpose, and for alterations in the Mitchell's road sewer, with which the new drain was to connect. The Local Government Board did not approve your proposal, and you agreed to their suggestion with the consent of the Parochial Committee, to construct a

sewer in the Upton road to connect with the Mitchell's road sewer to be lengthened for this purpose, and thus ends what has long been a reproach to the administration of the Isle of Wight Rural Sanitary District, a reproach which may have been removed any time during the past ten years. Naturally the committee of a poor parish were unwilling to sanction any expenditure not actually forced upon them, and as the ratepayers had suffered from the action of the Sanitary Authority, there was an indisposition to take action without the approval of the parish. This approval came at length as the result of the broad viewed advice of the gentleman who acts as Clerk to the Parish Council, to whom both Ashley and Biinstead are greatly indebted. The delay will have its compensation in the sewer to be laid in the Upton road. It is strange when so much greater value may be obtained for a comparatively small additional outlay it should be opposed with such determination.

Fairlee Road  
Sewer.

For several years it has been in contemplation to lay a sewer in the Fairlee road, to connect with the Newport system, and eventually plans were prepared. Delay was occasioned in the main by the difficulty of obtaining land for outfall into the Estuary of the Medina, and then by the unwillingness of the Corporation of Newport to negotiate until their sewerage works were completed. To save time you accepted a tender for carrying out the work as quickly as you could after arranging with the Corporation. You then applied for leave to borrow £500, and the Local Government Board Inquiry was held in August. It was discovered the estimate was deficient by some £200; fresh tenders were obtained, and at the time of writing the sewer is about to be laid.

The sewerage of the Village of Carisbrooke, an undertaking which has been a long time in view, and in connection with which there has been much controversy, is taking place. By agreement with the Corporation of Newport the Local Government Board were requested under Sec. 28, P.H.A., 1875, to arbitrate between the two authorities in the matter of payment for the discharge of the sewage into the Newport sewers. The award was satisfactory to all concerned.

You have again taken steps with reference to the Wootton sewer. extension of the Wootton sewer, a very necessary improvement having regard to the increase of new buildings on the west of the village. The delay has been occasioned by the North Arreton Parochial Committee who requested that the question be postponed for a time.

Freshwater, which from a picturesque village has become a scattered township, has outgrown the primitive arrangements which met its former requirements, and each year during the present decade the necessity of a public sewerage system has become increasingly urgent and is now universally recognised. In 1892, the Local Government Board granted the petition of the Rural Sanitary Authority against a County Council Order constituting Freshwater a local board district, on condition, among other things, that an undertaking should be given to sewer the place. Without delay a scheme was obtained and an application for leave to borrow about £15,000 was made for the purpose of carrying it out; but it was not approved by the Central Authority. After much delay for which you were in no way responsible, you engaged, upon the advice of a distinguished authority, another engineer whose speciality is the sewerage of towns, who prepared a scheme which recommended itself

to everyone who examined it, and you accepted it in principle. The estimate of cost—£18,000—was thought by the Parochial Committee to be prohibitive upon an assessable value of about between £11,000 and £12,000. Apart from the exaggeration of facts which tell against private interest and the minimising of those which tell in its favour, a not very creditable characteristic in the public life of to-day, the additional burden of a large debt upon a place with a low rating like Freshwater, is a serious consideration; and the very strong opposition which the scheme has received from the Parochial Committee on the ground of cost is not, therefore, surprising. It has consequently remained in abeyance pending consultation with the engineer about draining Freshwater in sections, discharging a portion of the sewage directly into the sea beyond Freshwater Bay, and with reference to the purifying the sewage of that part of the parish of Totland, the drainage of which forms part of the scheme, into the Totland Bay sewer. The advice given was that no great diminution of cost would be effected by attempting to drain in sections, and that it would be increased by draining into the sea, and by pumping the sewage of the Totland section. In the meantime the Central Authority were calling upon you to fulfil your obligations, in connection with the sewerage of Freshwater. Complaint was made of your default by a large ratepayer, and a Local Government Board Inquiry, conducted by one of their most experienced engineer inspectors, has been held in consequence. The result of this Inquiry has not yet transpired; but it cannot fail to be useful not only in proving the difficulties with which you have had to contend, but in showing the pressing necessity which exists for sewers. As a means of saving expense the septic system of sewage treatment has been

brought under the notice of the Parochial Committee, who have called your attention to it. The Freshwater district is very difficult to drain, and impossible at a comparatively small outlay such as would be covered by a shilling rate. The scientific scheme before you proposes to raise the sewage from a low level into a high level sewer by means of Shone's ejectors worked by an engine at the proposed outfall works. The Freshwater Bay and Yar districts must be sewered as well as the School Green and Camp Lane districts; and there must be a high-level sewer to drain the other districts in which new houses are being built, and to carry the sewage of the low lying districts to an outfall. But in construction, the cost of the pipes to work the ejectors alone must be considerable having regard to the distance, and the labour at the engine and sewage outfall, and the treatment of the sewage, must involve a permanent outlay of not less, probably, than £150 a year. If instead of raising the sewage it can be treated without nuisance at any outfall, not only must the permanent charges be diminished but the prime cost would be considerably reduced, as the outfall sewer and the lifting apparatus need not be made, and an engine would not be necessary. I am not prepared to say if the septic system, which is in my opinion the system of the future, is in its present stage of development adapted to meet the requirements of Freshwater; but I believe the Local Government Board have not hitherto given sanction to borrow money for its adaptation without requiring land filtration for the effluent. In the meantime you are committed to the scheme for which you have asked sanction to borrow £20,000 and you are awaiting the Local Government Board Inquiry.

You have obtained estimates from your Inspector for Gurnard sewer, the sewerage of Gurnard, which place has been one of

your difficulties as regards efficient sanitation. It has been absolutely impossible for you to obtain an independent water supply from either of the sources which might become available, and without such a supply for flushing, your experience, at least, has taught you sewers ought not to be laid. Although under the pressure of hostile action you proceeded to plan sewers before a water supply exists at Gurnard, you were justified in doing so seeing that you have made arrangements for its provision within a limited period.

**Plans of Sewers.** An extraordinary omission has been made in your district in not requiring tracings of the sewers to be deposited with you by the persons employed to carry out sewerage works. Without such plans the direction of sewers and their depth beneath the surface cannot be known with certainty, and the house connections cannot be marked. For years the inconveniences which have arisen in consequence have been very great, and as the performance of your duties under the Public Health Act in making sewers has progressed, they have constantly increased. You decided upon the recommendation of your committee that the Clerk should prepare a list of the plans of sewers which are missing, and that the inspectors should be directed to indicate on Ordinance sheets, to be kept at the office in a portfolio frame for reference, the direction of all existing sewers and water mains.

**Water Supply.** Your obligations as regards water supplies are very definite. By sec. 3, P.H. (W.) A., 1878, it is laid down that the Sanitary Authority are "to see that every occupied dwelling-house within their district has within a reasonable distance an available supply of wholesome

water sufficient for the consumption and use for domestic purposes of the inmates of the house." No new dwelling-house can be occupied without your certificate, which can only be legally granted after the Medical Officer of Health has certified that it has a sufficient supply of wholesome water. Your predecessors had experience of the fact that, if he does not give this enabling certificate—upon the ground that although the water contains no impurity which can be recognised by chemical or bacteriological tests, it is liable to become contaminated, and is therefore unwholesome—the Justices will certify for occupation, if appealed to, without reference to source of supply, provided the water can be proved chemically pure. Doubtless, by so doing, they interpret rightly the law as it stands, but if the law be defective in this respect, you cannot, as a sanitary authority, acquiesce, seeing that you are the guardians of the public health. It is within your knowledge that water which was proved by chemists to be pure contained poison sufficient to lay low one in twenty of the population drinking it. I have ventured to again call your attention to this subject, because members of sanitary authorities even, sometimes still seem content if a satisfactory report of a sample of water is received from a chemist. Water drawn from a porous sub-soil into which a cesspit leaks—and most cesspits leak—cannot be considered satisfactory water to drink, though it be described by a chemist as a good potable water. It is for this reason independent water supplies, drawn from sources free—now and in the future—from possible risk of pollution, are especially desirable; and it is for this reason more particularly you have given, and are still giving, earnest attention to the provision of such supplies. It is only in this way that you can, as a sanitary authority, meet the difficulties

under the law to which I have referred. During the year under review, you devoted much time to the consideration of this important question.

Brading and  
Bembridge  
Water Supply.

The history of your efforts during the year to secure an independent water supply for Brading and Bembridge may be given in a few words. Having agreed with the proprietors to purchase the Bembridge Waterworks for £2,000, and the Bembridge Gasworks for £1,000, you applied for sanction to borrow money for that purpose; your intention being to supply Brading as well as Bembridge with water, and to use the gas for pumping and for the lighting of Bembridge. As the Gasworks were already paying expenses, and more, and as water would be supplied to the majority of houses in Brading as well as Bembridge, within a comparatively short time in all probability, it appeared to you, the bargain you proposed to enter into was a remarkably good one financially for the people of the two places; and as Brading would have the opportunity, if it so minded, of a gas supply, it seemed likely the two communities interested would get the benefit of what are considered essentials in modern life, at a minimum cost. The Inquiry, which was held in August, resulted in refusal to sanction the purchase of the Gasworks, and an opinion that you had not sufficiently considered the subject of the purchase of the Waterworks. You were advised to ascertain if the Isle of Wight (Sandown) Waterworks Company or the Ryde Corporation would supply Brading and Bembridge—the former from the River Yar, below Alverstone; the latter from the Lower Greensand, at Knighton. The Brading Parochial Committee had already refused the terms of the Isle of Wight Water Company, namely, an annual charge of ten per cent. upon

the outlay for water-mains, and a rental from the consumers of the water. The Bembridge Parochial Committee, upon reference to them of the same terms, declined to entertain them, or to consider the question of a supply from the Ryde source. The Ryde Corporation were unable to reply to your application until they had ascertained what supply they would obtain from a new boring they were making.

You are very directly interested in the Ryde water supply, upon which the population of your district north of the Downs, and east to Wootton Creek, and, possibly, Wootton itself, will eventually depend. It is by no means an unlimited supply, and is not likely to be, having regard to its source. The floor of the underground reservoir, from which it is pumped, is the Weald clay, which outcrops in Sandown Bay, above high water mark, in the east, and is on the surface between Brighstone and Brook, in the west-sou'west. Should the supply fail in the districts already served, by reason of increasing population, it would be very difficult to supplement it; and it would seem to be bad policy, and one inimical to the interests of your district, to attempt to make it available for other growing districts south of the Downs, like Brading and Bembridge, where ample local supplies exist.

The Local Government Board gave no reason for the conclusions at which they arrived. It would have been more satisfactory to you if they had. The strong local opposition of those who think their properties sufficiently supplied, which was brought to bear at the Inquiry and privately, may have had some weight, but it ought not to have availed much. I pointed out in my last annual report that at least seven years ago the Brading Parochial

Committee were directed to devise a scheme of water supply for that place. Contrary to the responsible advice they received they simply wasted the ratepayers' money in seeking an impossible source of supply; and when a proper scheme was prepared at an estimated cost of £200 a year for thirty years, they said it would ruin the place. At Bembridge, matters have been almost as bad as they could be. The water supply has been utterly inadequate for many years, but the local body have done nothing; have not even made a suggestion. The Brading Harbour Company, for the supply of their Lodge estate, did a most ill-advised thing in sinking to a stratum the sand of which eventually choked their pipes and wore their pumps; but they supplied part of Bembridge, the people of which grumbled at their high charges. Last season there was again a complete water famine, or there would have been had not the water of the company been taken surreptitiously. The chief source of supply for drinking, as I have stated for years, is the north well, the owner of which has graciously permitted access to it. I have often been told Bembridge had in the north well the best drinking water in the Isle of Wight, and yet after being kept a few hours in a vessel last summer it stank. Even this supply almost entirely failed. Opposition to your efforts to safeguard the public health in such places should have little weight.

When the supply of the company from the Headon beds failed they pumped from the Bembridge Limestone, which is almost at the surface between Bembridge and Brading, and when this supply was offered you with its pumping engines and all its plant for £2,000, it seemed to you an opportunity of fulfilling your obligations to both Brading and Bembridge, which you would not be

likely to have again for many years, and you accepted it. Of course the Parochial Committee of Brading did not wish to have anything to do with Bembridge, and the Parochial Committee of Bembridge did not wish to have anything to do with Brading ; and of course there was a suspicion that the interests of the vendors would not be wholly sacrificed. It is always such a sin in other people to have private interests. But you saw that Bembridge and Brading could be supplied with water most economically from one source, and you knew that if the supply proved insufficient as population increased, you could at small expense find another. If cost were no consideration you would, of course, supply Bembridge and Brading from the Chalk ; but experience has taught you that any such attempt would fail. The Brading Parochial Committee had already refused such a supply, while they were willing to accept a supply from the Knighton Waterworks because any financial deficiency they hoped would fall upon the ratepayers of Ryde and not on the ratepayers of the Parish of Brading. This remains to be proved. At the time of writing the mind of Bembridge would seem to be in favour of purchasing the existing waterworks, provided Brading has nothing to do with the matter. You are intent upon safeguarding the public health of Brading and Bembridge by means of an independent water supply. Your object will be met by a sufficient supply of wholesome water to each place ; but your broader view enables you to see that in years to come the sanitary condition of the population will be highest in that place in which there is no restriction upon the use of water, the place in which this great necessity of life is free.

The charge is often brought against you that your movements are exceedingly slow, and certainly some of your

methods seem to court delay ; but, while not in the least degree assenting to the desirability or necessity of these methods, I think if some of the other Authorities of the Wight, members of which constitute themselves your critics, had been a little more deliberate in some of their movements, the interests of the ratepayers of the Island would have been better safeguarded. Last year I reported you had obtained sanction to borrow £1,200 for the supply of Haven Street and Upton, and the district between, with water from the Ryde Waterworks. At the time of writing the pipes are being laid, and before early summer this great sanitary improvement will have been effected. The reason of the delay has been two-fold. Additional estimates were obtained to enable you to judge if the cost would be diminished by purchasing the pipes and delivering them to the contractor. Even if delay were involved, it was your duty to protect the parish of Ashley, to the utmost of your ability, and particularly as the Parochial Committee had with rare acquiescence accepted willingly—if they did not initially—the scheme of independent water supply. But this delay has practically made little difference, seeing that the Corporation of Ryde have been laying an additional water main, and they could not supply you until that work was completed.

Binstead  
Water Supply.

Your experience is, that if you take water into a place the supply is extended year by year until the whole population are protected. This fact has been exemplified at Binstead, and the extension of the Ryde supply to Fishbourne and Kitchill through the Binstead main is only a question of time. A scheme to this end which had been under consideration was prematurely disclosed in 1897, under circumstances already described.

The clay district on the east of the estuary of the Medina extending from Newport to East Cowes is badly off for water, and the only means of efficiently meeting this dearth is from the Newport supply. Fairlee Road is thus supplied and an inch pipe is continued beyond the first milestone on the East Cowes Road. The Corporation of Newport have determined to lay a larger pipe and this will be gradually extended, it may be hoped, to Whippingham, and ultimately, perhaps, to Osborne and Cowes.

The Newport Corporation, under their statutory powers, may supply the parishes of Northwood, Whippingham, and Carisbrooke with water. They were willing that you should extend the Horsebridge Hill supply to Northwood, you laying the pipes and purchasing the water from them. The question was submitted to the Northwood Parochial Committee who requested you to make arrangements with the Corporation to act under their powers as a water company in that parish. A committee of your Council accordingly met a committee of the Corporation and an amicable understanding was come to. The Corporation have undertaken to lay water mains throughout Northwood, including Tinkers Lane and Gurnard, and to supply water, the charge for which will be regulated by a schedule of prices to which you have agreed with the consent of the Parochial Committee. The work is to be commenced within a year. In my last annual report I dwelt fully upon the question of the water supply of Northwood, and I pointed out to you the duty of sanitary authorities to retain in their own hands the water supplies of their district. Hitherto this has been done in the area under your jurisdiction with a few exceptions such as Haylands, Carisbrooke, Bonchurch, Freshwater, Totland and Yarmouth. It would seem now

Fairlee  
Water Supply.

Northwood  
Water Supply.

that for the parishes the Corporation of Newport have the right to supply, the population will be in the bonds of a water company, of which I myself am a shareholder. It is no satisfaction to me that if I live long enough I shall benefit, if what I hold to be an important principle of sanitary administration is sacrificed ; but it will be a compensation to know that many of the inhabitants of Northwood, Whippingham and Carisbrooke are protected, as they have not hitherto been, against the risk of disease, by a constant supply of the purest water ; and it is to be hoped and expected that, as business men, the members of the Corporation of Newport will see the desirability, having regard to the financial interests of the ratepayers of their borough, of treating their customers well, for Newport has to bear a heavy financial burden. But the paramount interest of the people of Newport in this connection is that the population surrounding them should be healthy, and by doing their utmost to protect them, they should be able to see they are protecting themselves.

It is a subject for congratulation—I may say, for jubilation—not only to the inhabitants of Newport, but to the whole of the Isle of Wight, that the metropolitan borough—the business centre of the Island—has provided itself with such a magnificent water supply. When present controversies have ceased, and the heart-burnings and petty wranglings which have arisen out of them are forgotten, a more enlightened generation will deem it fortunate that stricken Newport, in her dark hour of depression, advised with a highly-skilled engineer and that he almost forced upon her whole measures of safety for the present and the future. By tapping the reservoir of the Chalk, in the upper Bowcombe Valley--from which

the head waters of the Lukely issue—at a considerable distance beneath the surface, one of the best Chalk water supplies I know has been obtained—a supply which will probably be free for all time from the risks which attach to water supplies from that formation. The elevation of the source of supply will enable the water to be led by gravitation, to a large portion of the area of distribution, and by pumping to the contemplated reservoir on Alvington Down, not only will the whole area be commanded, but the towns of East and West Cowes, which will eventually be included in it.

During the laying of the water main, the underground water filled the trench made for that purpose, and had to be constantly pumped into the Lukely. As an unavoidable consequence, the water in the wells on the west of the valley was necessarily lowered, and for the most part, exhausted. The water famine, which followed in that part of your district during the summer, inconvenienced the inhabitants, but no sickness resulted as a consequence. Drinking water was supplied to them by the Corporation, by means of a water cart. The main which supplies the village of Carisbrooke has been continued up the Bowcombe Valley, by agreement with the owner of the land beneath which the water is obtained, for the benefit of his tenants. Already the water has been laid on to houses owned by other persons, and although most of the properties possess wells, the convenience and economy of labour involved will stimulate further connections, until all the inhabitants obtain the security of an independent supply of wholesome water.

Within your district as it is, and belonging, as it does, to the ratepayers of your district as part owners, the water supply of the Asylum in the Whitcombe Valley is

The Water Supply at the Asylum.

of interest to you, although you are not responsible for it. There were cases of enteric fever among the inmates in 1897, and the water supply being considered unsatisfactory, it was resolved to sink and bore to a greater depth. I understand the bore-hole passes through the Gault to a considerable depth in the Lower Greensand. Should water not be found in this formation, and if the boring be continued through the Weald, it will become of considerable geologic interest, and, if still continued, the problem of the extension of the coal measures beneath the Isle of Wight may be solved to the great economic advantage of its inhabitants. But if this be not done, it would seem most unfortunate the recommendation made when the Asylum was building, that it should be supplied independently from the Upper Greensand, was ignored. A very small fraction of the water of the stream which runs within a few yards of the building, if taken as it issues from the rock, would have been sufficient to supply the Asylum by gravitation.

Newchurch  
Water Supply.

The severe incidence of diphtheria at Newchurch directed your special attention and that of your predecessors to its water supply. From time to time, reports have been made by the several inspectors in the East Mede upon the subject, and the Rural Sanitary Authority closed the quasi public well near the Church-yard, because it was proved to contain graveyard soakage. As Newchurch is only a hamlet, the difficulties in the way of giving it an independent water supply have hitherto appeared almost insurmountable. During the past year, it has come to your knowledge that the owner of Apse Heath has in contemplation to supply it independently from the Upper Greensand, at Apse, near Shanklin; and you have entered into negotiations with

him for extending the supply to the village of Newchurch and to his property at Bordwood. The disadvantage would be the long length of unremunerative main, but it would pass several homesteads, and although their occupiers claim to have good supplies of well water, they would be exceptional if they did not presently appreciate the economy of labour saving, and they would probably soon apply to have the water laid on. It will be a misfortune if this opportunity be not taken advantage of, and if negotiations are delayed by the Parochial Committee, while the usual objections are being made to the substitution of an independent, for an underground water supply liable to pollution from the surface and from farm-yard soakage.

The plans for the independent water supply of Apse Heath have been prepared and will be carried out. This will be another sanitary advance in your district due, as other advances have been, to an enlightened land owner.

It was very pleasant to me last year to felicitate your Council, and particularly two members of it, upon the supply of Wroxall with wholesome water. In all the preceding years, during which this water supply was under consideration, the former representative of Wroxall, who is still a member of its sanitary authority, gave a large amount of time and labour to the subject, and he, too, is to be congratulated. It is very satisfactory to be able to report that you have arranged to extend the main works towards Whiteley Bank, at an estimated cost of £150—£7 10s. od. a year. Subsequent short extensions will probably be done out of current revenue, and before many years have passed, it may be a question whether Wroxall or Whitwell will have the advantage of a revenue from Godshill.

Apse Heath  
Water Supply.

Wroxall Water  
Supply.

Whitwell  
Water Supply.

You have placed the water supply of Whitwell upon a proper administrative footing, and the Parochial Committee have accepted the schedule which is in general use in your district. In future new houses will come under the schedule, as will old houses if the water is laid on to them, those being exempt during the lives of the owners who subscribed at the inception of the water scheme an amount which secured that privilege.

Niton Water  
Supply.

You obtained a scheme for an independent water supply to Niton from the Upper Greensand, and negotiated with the owner of a powerful spring on Niton farm. The conditions being onerous, you are now negotiating with the owners of Downcourt. If you are successful in arranging the purchase, this site will be more advantageous, as the water will be led by gravitation to the houses you propose to supply. It is desirable the site be at the highest elevation at which water can be found, as an independent water supply will stimulate building operations at Niton, and areas will be covered with houses which are at a greater height than those now built upon.

Chale and  
Blackgang  
Water Supply.

You have had under consideration the supply by independent means of Chale and Blackgang with water. Several houses at Blackgang are already separately so supplied from the Upper Greensand, forming the Down which bounds it on the north. You propose to go to the same source at the highest elevation at which water can be found, in order that new houses at Blackgang may be supplied.

Arreton Water  
Supply.

At Arreton your predecessors closed a pump on the highway to the church in the west of the village, because the well was seriously contaminated by sewage and grave

yard soakage. It was really a private pump for the supply of cottages in some of which labourers working on Arreton farm lived, but it was used by the public generally. The owners of the farm employed a diviner, and initiated a scheme of water supply, but the diviner's source failed. After finding water it was piped to the village for the supply of the cottages, the Vicarage, and the Inn. This water was sometimes peaty—showing that it was derived, at least in part, from the surface—and the people would not use it. The landowner having expended about £700 and deriving in water rentals, only about £12, declined to do more, and the South Arreton Parochial Committee took the matter up, and they have continued to exploit for water to the north-east of the Manor farm house, you having sanctioned their expending in all £80. As I have often pointed out, the only desirable source of supply is the Upper Greensand. It lies between the Chalk and the Gault clay, its outcrop being covered by "malim," which is composed of washings from the Chalk which is at the surface at the upper part of Arreton down, that is to say above the Upper Greensand, which it is difficult to find, therefore, although its presence is evidenced by an outcrop to the north-east of the Aldermoor. The water found in the "malim" flows out of the Greensand above the clay. The foot of the down is very shelving, and the "malim" in part covers the Gault, and the water is held up in it by this Gault clay. The plan I have recommended is to bore with one of the handy borers used by the geological survey, north of the outcrop of the Gault—say in a field called "Kirtles," or somewhere in a line with the outcrop of the Greensand of which I have spoken, down to the Gault, for the water is in the strata of the Greensand immediately above the Gault—and if the borer passes through sandstone rock it is

certain to be Upper Greensand. If the depth should prove considerable it would be a simple matter to bore again farther south. But when the source is found? I assume it is your intention, having sanctioned the outlay of the Parochial Committee, to give Arreton an independent water supply. The alternative is to let the owner of the land do so, you having found him wholesome water. He already supplies houses which do not belong to him, and the extension of the watermain through the village is only a question of time. With all due submission to your judgment this method of yours of leaving to Parochial Committees—who are not inclined to seek advice or to accept suggestions, but resent any appearance of interference with their absolute control—to grope about after water supplies for villages, and to employ who they like to elaborate water schemes, does not seem quite dignified, or to harmonise with your duties and responsibilities as a Sanitary Authority.

I need not repeat the history of the attempts to make the water which issues in such great abundance from the Chalk at the south of the village of Calbourne available for the supply of its inhabitants and those of the parish generally, throughout which, speaking broadly, the Bembridge clay is at the surface with the Bembridge Limestone beneath it at a depth of from one to a hundred feet. South of the outerop of the Limestone—which may be seen in the form of steps in the lane leading from Fivehouses towards Newbridge—and between it and the Chalk down, water can only be obtained in limited areas of sand and gravel deposited in pockets in the clay. To supply the whole parish of Calbourne with water would probably cost about £150 a year for thirty years; and on this account, and having regard to the fact that the parishes of Calbourne and Shalfleet could be more economically supplied

from the Chalk at Calbourne by a joint scheme, you ordered one to be prepared. The Parochial Committees, both of Shalfleet and Calbourne, declined to work together, however, and this scheme you abandoned in consequence. You then instructed the West Medene Inspector, acting as your Surveyor, to prepare a scheme and estimates for the whole of the parish of Calbourne. He estimated the cost, as I have intimated, at £3,000. It would be a great boon, both to the village and parish of Calbourne, to have an independent water supply, and the saving in labour alone, especially in dry seasons, would probably exceed the amount of the annual charge; but agricultural parishes do not look at the question from that point of view, and as far as possible the annual charge would be thrown upon the landlord which would not be fair as the farms are taken with the disadvantages attaching to them.

The desire to be disassociated with the parish of Cal- Shalfleet Water  
Supply. bourne in the matter of its water supply influenced the Shalfleet Parochial Committee to present to you an alternative scheme for that parish. Ostensibly the reason for this action was the conditions imposed by the owner of the water at Calbourne in making a free gift of it to the joint parishes, which conditions you accepted. They were merely legal precautions customary in making such a gift to the public, which the abundance of the water at all seasons rendered it extremely unlikely it would ever be necessary to enforce. The committee chose the Bembridge Limestone near its outerop at Churchills as their source of supply. Its elevation is so considerable that nearly the whole of the parish may be supplied from it by gravitation. A committee of your Council met the Parochial Committee on the spot and

were enthusiastic in their appreciation. They reported to you most favourably and you abandoned your own scheme and adopted that of the Parochial Committee. You applied to the owner of the land with a view to purchase, but negotiations were declined until you had paid a fee of £25. The conditions when presented were submitted by you to the Parochial Committee and declined. They recommended you to relinquish all idea of the Churchills source as the conditions were onerous and impossible, and you did so. It was fortunate for you that the agents of the owners of the property were sufficiently impracticable to render it impossible to continue negotiations for purchase as you would most probably have failed to obtain sanction for a loan. The Bembridge Limestone so near its outcrop would scarcely have been a safe source of supply for a considerable population unless very large storage reservoirs had been constructed. The supply is constant but during periods of drought it rapidly diminishes and the wells go almost dry, that is to say they are quickly exhausted. Deep wells into the Limestone at points where there is a much larger collecting area than at Churchills—e.g. at Ningwood House—are pumped out at night, but in the morning it is found a fresh supply has run in. There was another strong objection to the source you approved. For long ages the sewage of Churehills farm yard, only separated from it by the width of a meadow of inconsiderable size has been soaking away into the Limestone down to the Osborne clay beneath it which forms the floor of the underground reservoir of this formation, with the water of which it necessarily mixes. There is an equally good source of supply from the Bembridge Limestone without this drawback at "Prospect," where in all probability you could obtain the water and a site for a

reservoir upon reasonable terms. But I have always reported to you that the Secondary water bearing rocks should be your sources of public water supply and I have frequently pointed out to you that these are available in every part of your district. I am aware I recommended you to adopt the Bembridge Limestone as the source of supply of the joint Bembridge and Brading scheme, but this was because of the circumstances of the case, and because I knew there would be no other chance of obtaining protection for the people of Bembridge and Brading for another decade, and perhaps not then, having regard to the certain opposition of the small property owners who are the real obstacles to sanitary progress in such places. As you have abandoned a joint scheme of water supply for Calbourne and Shalfleet with its source in the centre of the joint district at Calbourne, the origin of the other main branch of the *Caulbourne* at Shalcombe is undoubtedly the proper source of supply for the parish of Shalfleet alone, and it would have this very great advantage: the people who drink from the stream polluted at its head by the drainage of Shalcombe and Chessell farmyards, and among whom cases of enteric fever have from time to time occurred in recent years, would be protected.

The water supply of Brightstone has served to illustrate the fact that independent supplies once established are extended far beyond the limits of the original scheme, until the benefit of protection is obtained by practically the whole of the population of the district. Unfortunately the condition imposed by one ratepayer, who receives an annual payment as compensation for any possible interference with his water rights, that the water should not be carried beyond the boundaries of the parish of Brightstone Water Supply.

Brightstone, was assented to. He acted in good faith supposing his interests were jeopardised, but the Sanitary Authority should never have assented to such a condition. The absurd and illegal plea of "home rule" which claims parish government in sanitary matters is contrary to the interests of the common weal, and should be resisted with the utmost vigour, because it means the rule of one or a few men, presumably swayed in more than ordinary degree by the influences of self interest. There would now appear to be a disposition to waive this condition, and the Brightstone water supply is likely to be extended in some measure to the parish of Mottistone. In the future this supply may solve the question of the independent supply of Shorwell.

The subject of the protection of the population of your district by means of independent water supplies must continue to engage your most serious attention in the future as it has done in the past. You should be strong enough to bear down opposition to the performance of your paramount duty in this respect. Permit me respectfully to say you are not delegates of Parish Councils but representatives of the people, charged with most serious responsibilities. In the great majority of cases of opposition to water supplies the resistance comes from those who consider they have wells of water of satisfactory quality, and who fear lest they may have to pay the fraction of a penny rating should the water rentals prove insufficient to balance the annual charges. They are incapable of understanding the protection they themselves obtain by an independent supply even though they do not drink from it, and a loan of a few hundred pounds in a parish involving an annual charge of 5 per cent. for thirty years seems to them nothing less than

spoliation. The insular perception of things was illustrated at the Brading Inquiry, and I have been told frequently that there is no parallel to the waste of money in water supplies in the Isle of Wight. I can only say the average expenditure of the country generally in water-works has been £120,000 for each million gallons per diem of supply.

As foreshadowed in my last annual report, a memorial was presented to the General Purposes Committee from West Cowes praying for the annexation of Gurnard to that urban district. It was decided a *prima facie* case was made out and an Inquiry was held. The Committee recommended that Gurnard should be annexed to Cowes, and by a narrow majority the County Council resolved to issue their Order, against which you have very properly appealed not only in the interests of your district generally and of the parish of Northwood particularly, but especially because the great majority of the inhabitants of Gurnard do not wish to be included within the boundaries of the urban district of Cowes. Although the annexation of Gurnard by Cowes was talked about at times when the County Council was being made the instrument of the appropriation of rural rateable value by the rival towns on the south east coast of the Island, it was known to be considered undesirable by some of its most responsible inhabitants. It was not until Newport had obtained a very abundant water supply and was contemplating its distribution in the parishes it had authority to supply that annexation was threatened by the Cowes District Council. It was then distinctly stated that unless the Rural District Council retained the water supply of Gurnard in their own hands Cowes would annex it. As I have already said, the Rural District Council practically left the decision in the hands of the

County Council  
General  
Purposes  
Committee  
Inquiry.

Northwood Parochial Committee, and the Corporation were requested to supply the parish of Northwood including Gurnard. I have given my reasons for differing from you in the course you took, and I went so far as to express the opinion that an unfriendly controlling authority would have a valid excuse for taking a district from one sanitary authority who declined to hold control of its water supply and hand it to another who would do so. But as Newport is within its statutory rights in claiming to supply Gurnard with water, Cowes cannot hold the control. The reasons given by leading members of the County Council for the course which culminated in the issuing of the Order were rather remarkable. One was that Gurnard should be given to Cowes to enable it to compete with the rival watering places on the mainland, a reason more insular and narrow and more prejudicial to the interests of the Island one cannot conceive. The Isle of Wight towns cannot compete with the health resorts of the southern coast in the sense intended, and to attempt such competition is simply to impoverish their inhabitants. From the outside point of view the Isle of Wight is the Isle of Wight as a whole, the attractions of which are of its own kind. That every part of it may prosper, it should have a reputation throughout for high sanitation; and it is the duty of the County Council to secure this in the manner which the law prescribes, and to do it intelligently instead of by a small majority—vote to harass and coerce the Rural Sanitary District and impede the work of your Council with the resulting ill-blood and animosities which will not die out for a generation. For “rival watering places on the mainland” should be read rival watering places in the Island. Another reason given was that the people of Gurnard

were living over their own cesspit. As a figure of speech, this is in a sense correct ; but it is unfair and partisan to accuse you of neglect of duty for not having sewered Gurnard. It has been my duty to report upon its sanitary state from year to year, and sometimes more frequently. I have spoken emphatically both of Gurnard and of other places in your district, because the circumstances of the case demanded it, seeing that the parish is the contributory place under the law, and having regard to the difficulty of overcoming the opposition of agricultural ratepayers, who object to the cost of sanitary improvements from which they do not see they derive direct benefit. It is this which accounts in great measure for the slow sanitary progress in rural districts ; but that progress is made in the right direction, the sanitary history of your own district proves. Progress would not have been made in the right direction, had you sewered Gurnard—as you have been urged to do by some of the few inhabitants who favour annexation to Cowes—before you had given it an independent water supply, which it has been hitherto impossible to do in a satisfactory manner. You could not obtain the supply from the gravel in Ruffins Copse, save on a short lease, and had you been able, the permanent charges for pumping would have been considerable. Cowes could not supply Gurnard and cannot do so now. It draws its water from the Bagshot Sands, a most unsatisfactory source of public water supply, for without constant pumping the pipes become choked, and with it the sand wears out both the pipes and the pumps. At the time of the Inquiry, the town was being very inefficiently supplied. Eventually, Cowes must obtain its water from the Chalk. Another reason given was that the sanitary state of Gurnard menaced the safety of Cowes. This is directly contrary

to the truth. It is no reflection upon Cowes, to say that Gurnard has suffered severly from its proximity to it. It has been my duty for 16 years to trace the origin of zymotic disease in Gurnard, and to do my best to guard it, and I am in a position to state, while admitting it was almost inevitable, especially before notification, that the poisons which produced disease have been introduced into Gurnard from Cowes directly, and in connection with the refuse from that town. But the sanitary question as regards the independence of Gurnard is, now, what its future will be. It is assured as to its water supply, for you have secured for it, by your agreement with the Corporation of Newport, as good a supply as can be obtained in the Isle of Wight, and with a constant service. Given this, its drainage will be of less urgency, and it may be wise not to force this concurrently with the water supply, as it may be that the cost of sewerage will be reduced if the septic system of treatment is found to be effectual and economical; but sewers will be necessary to the development of Gurnard, and they should be constructed as soon as practicable, having regard to the considerations I have referred to. If, therefore, Gurnard is absorbed by Cowes, it will be by *force majeure* applied at the instigation of a section of its inhabitants, for a considerable body of the ratepayers of Cowes oppose the annexation of Gurnard.

County Council procedure.

As a large amount of intelligent opinion in the Isle of Wight, outside its governing bodies, views with apprehension the action taken by bare majorities of the County Council in making changes to the detriment of your district, which should receive sympathy and encouragement rather than hostility—on account of the difficulties which beset sanitary progress in the rural areas—from

those appointed to promote the common good, it may be interesting to consider, with all respect to the controlling authority of the Island, the initial stages of this action. The County Council have delegated many of their powers to their General Purposes Committee, which contains a large majority of urban dwellers. When a petition is sent in to annex parts of the rural to urban districts, it is practically presented to this Committee. The statements of the petitioners are considered, and it has been hitherto always decided a *prima facie* case has been made out for an Inquiry. The Inquiry is held by a Sub-Committee, who have always hitherto decided in favour of the petitioners. The report is made to the Committee, who have hitherto recommended the Council to make an Order in favour of the petitioners. The Order has always been issued, with one exception, when it was refused until the petitioning parish and the parish—part of the area of which the other sought to absorb—could come to an amicable settlement. This was a course which makes for peace between neighbours, and promotes the common good. An Inquiry—at which the usual reckless and misleading statements about sanitation were made by the petitioners, and accepted—was held, while writing, on the petition presented at the instigation of its representative, by the urban, but largely agricultural, parish of St. Helens, to annex part of the parish of Brading. The decision was as usual in favour of the petitioners. The mode of procedure I have described, so contrary to that which obtains in all matters of dispute in civilized countries, would seem to be exceedingly inequitable. In order to decide that a *prima facie* case has been made out, one would suppose it necessary to hear the case of those petitioned against, and whose rights are assailed. But

the practice is to come to a decision upon an *ex parte* statement which must necessarily prejudice the minds of those who have to hold the Inquiry. The result must be that when one portion of the population under the control of a certain form of government, seek to obtain the possession of what belongs to another portion of that population, the agents of the government, who virtually decide the question, are the advocates, and the jury and the judges on behalf of the aggressors. In such a case as that of St. Helens against Brading, if a re-adjustment of boundaries were necessary, it should surely be arranged between the parishes concerned by means of reasonable give and take, and if agreement were found impossible the County Council may be appealed to as a perfectly impartial arbitrator. It is the coercion of inequitable *force majeure* which causes the friction which prevails, and not the statements of officers who have their duty to perform. It would be undignified and contrary to public policy and the general well-being to meet the accusations of bad sanitary control by counter accusations, but there has been no County Council Inquiry held in which that may not have been done, and had it been done, as a sanitarian I am able to say it would not have proved to the disadvantage of your district.

Although public health questions were prominently before Parliament during the year, there was only one measure of primary importance which passed into law, and the effect of it must be disastrous to the important interests involved. Possibly had it been known there would be such an enormous number of exemption certificates applied for, the Bill would not have been passed by the Legislature, or if passed, would have been accompanied by a measure of compulsory vaccination or

revaccination at puberty. The enforcement of vaccination and revaccination in Germany has proved that it is possible to practically stamp out the awful scourge of small pox. It is in the country of Jenner that the retrograde step has been taken of breaking down the barriers against it at a time when enormous advance is taking place in the knowledge of Nature's laws, at a time when investigation of those laws is making evident that Jenner anticipated by a century the mode of treatment of disease known as serum therapeutics, upon which all the hopes of those who understand these matters are centred as the means of effectually combatting some of the most terrible maladies which afflict the human race. It is impossible to argue with those who have forced this danger upon the country in opposition to the political creed which many of them profess, but to those who are simply indifferent or apathetic, and especially if they are members of sanitary authorities, I would say, it is the duty of every citizen to give heed to the warnings which are sounding throughout the land. Comparatively few have the time or the capacity for studying sanitary problems which involve the happiness and well-being of mankind; but everyone who chooses can cultivate that frame of mind in which he is ready to receive and act upon the conclusions of the expert.

You have wisely resolved to leave the question of the <sup>Bye-laws.</sup> revision of the Bye-laws until you have obtained wider experience of their operations. No laws are perfect and those which obtain in your district were the outcome of compromise. Every district has its peculiarities, and notes are being made by the Clerk of the difficulties you meet with, which will be available at the proper time. You appointed a small sub-committee to frame bye-laws

for dairies, cowslieds, and milkshops, who have not yet made their report. In the present state of knowledge of tuberculous disease, which includes consumption, the question of milk supply is of the greatest importance. The Local Government Board have, fortunately, issued an Order with reference to cows with tuberculous udders which are responsible for so much of the contamination of milk with the tubercle bacillus, and it will be your duty to act upon it. It is well that such orders should be issued to protect the community from the self sufficiency of ignorant people.

Legal proceedings.

You took legal proceedings in two instances. The first was to close a house unfit for human habitation, at Newbridge, and in this you were successful. In the second instance the offence was against the bye-laws. You provide for a certain air space behind houses, a requirement of much sanitary importance in your district where houses are often built near cliffs. A cottage, at St. Lawrence, was built against a cliff, but as the upper part of it rose above it, it was held the bye-law was complied with. This is one of the bye-laws the wording of which must be altered or you will have other cases of the same kind. One very objectionable form of egotism finds expression in attempts to evade laws made with only one object, the securing the common good.

Inspection.

In the middle of the year you appointed one of the Inspectors of the City of Manchester to your East Medene sub-district, and the result has fully justified your choice.

The Inspectors have furnished me with the following summaries of their work :—

### EAST MEDENE DISTRICT.

#### NEW HOUSES ERECTED, 1898.

Whitwell	...	Undercliff	...	...	1
"	...	Whitwell	...	...	3
Bembridge	...	Bembridge	...	...	8
Niton	...	Niton	...	...	4
Bonechurch	...	Bonechurch	...	...	1
Ashey	...	Haylands	...	...	1
South Arreton	...	Arreton Street	...	...	1
North Arreton	...	Wootton Bridge	...	...	4
Binstead	...	Quarr Hill	...	...	1
"	...	Binstead	...	...	2
Wroxall	...	Wroxall	...	...	2
Newchurch	...	Apse Heath	...	...	2
					—
			Total	30	

#### SUMMARY OF WORK DONE DURING 1898.

Number of nuisances and other matters reported...	...	519
" " abated without final notice	...	182
" re-inspections <i>re</i> nuisances	...	239
" final notices served	...	19
" houses reported unfit for human habitation	...	0
" " placed in repair	...	0
" " closed	...	0
" " cleansed and disinfected	...	26
" legal proceedings taken	...	1
" cases of overcroding reported	...	1
" " abated	...	1
" privies and cesspools provided and properly constructed	...	17
" privies put on pail system	...	26
" wells sunk and other improved supplies obtained	...	95
" wells cleansed	...	2
" " closed	...	0
" pumps repaired	...	1
" " provided	...	17
" houses drained and connected with sewer	...	20
" house drains repaired and trapped	...	58
" refuse and accumulations removed	...	35
" dairies inspected and re-inspected	...	32
" " lime-washed after notice	...	3
Districts scavenged—Brading and Bembridge	...	2
Plans of new buildings approved by R.D.C.	...	49
Inspections made of new buildings	...	312
Extension of Whitwell main to Southford		
" Binstead " in Newnham Road		

## WEST MEDENE DISTRICT.

## NEW HOUSES ERECTED, 1898.

Freshwater	...	Freshwater	.....	II
"	...	School Green	...	I
"	...	Afton	...	I
"	...	Norton	...	I
Totland	...	Bay	...	5
"	...	Avenue	...	10
Yarmouth	...	Yarmouth	...	3
Carisbrooke	...	Carisbrooke	...	16
Northwood	...	Whippance	...	I
"	...	Horsebridge Hill	...	6
"	...	Gurnard	...	8
"	...	Rolls Hill	...	2
"	...	Pallance Road	...	2
"	...	Furzyhurst	...	2
Chale	...	Chale	...	2
Calbourne	...	Calbourne	...	2
Shorwell	...	Shorwell	...	3
Shalfleet	...	Bouldnor	...	4
				—
			Total	80

79 with Certificate and 1 without

## SUMMARY OF WORK DONE DURING 1898.

Number of nuisances and other matters reported	...	...	...	617
" abated without final notice	...	...	...	153
" re-inspections made	...	...	...	289
" official notices served	...	...	...	22
Houses reported unfit for human habitation	...	...	...	I
" placed in habitable repair	...	...	...	0
" closed	...	...	...	1
" cleansed and disinfected	...	...	...	38
Legal proceedings taken	...	...	...	1
Cases of overcrowding reported	...	...	...	4
" abated	...	...	...	4
Privy cesspools provided and properly constructed	...	...	...	84
Privies put on the pail system	...	...	...	52
Wells sunk and other improved supplies of water obtained	...	...	...	119
" cleansed	...	...	...	I
" closed	...	...	...	1
Defective pumps repaired	...	...	...	1
Pumps provided	...	...	...	12
Houses drained and connected with sewer	...	...	...	20
House drains repaired and trapped	...	...	...	76
Refuse accumulations removed	...	...	...	8
Dairies inspected and re-inspected	...	...	...	57
" lime-washed after notice	...	...	...	3
Bakehouses lime-washed after notice	...	...	...	2
Districts scavenged—Freshwater, Totland, Yarmouth, and Carisbrooke	...	...	...	4
Plans approved by R.D.C.	...	...	...	57
Number of inspections to new buildings	...	...	...	348

I am indebted to A. N. Le Messurier, Esq., for the following summary of meteorological observations made by him at the Post Office, High Street, which is between 40-ft. and 50-ft. above sea level.

Month.	Maximum for month.	Minimum for month.	Mean Daily Maximum.	Mean Daily Minimum.	Mean Temperature.	Rain all for month.	Number of Wet Days.	Greatest Fall in one day.
Jan. ...	53·7 on 22nd	26·0 on 16th	48·2	38·3	43·2	0·42	4	0·26 on 4th
Feb. ...	55·0 on 1st, 12th	28·2 on 6th	48·5	40·1	41·3	2·49	16	1·00 on 21st
Mar. ...	59·1 on 18th	24·6 on 22nd	48·1	35·0	41·5	0·50	11	0·08 on 1st
April...	65·7 on 8th	25·3 on 5th	54·6	38·6	46·6	1·09	11	0·30 on 27th
May ...	70·7 on 23rd	33·0 on 13th	61·4	44·5	52·9	3·66	21	0·56 on 20th
June ...	79·0 on 11th	38·8 on 3rd	67·3	48·6	57·9	2·37	11	0·60 on 8th
July ...	84·2 on 16th	41·3 on 11th	74·1	52·2	63·1	0·16	5	0·07 on 22nd
Aug. ...	85·8 on 15th	46·2 on 1st	73·8	55·5	64·6	1·85	14	0·42 on 15th
Sept....	85·5 on 8th	37·0 on 25, 29	71·3	50·9	61·1	1·20	6	1·01 on 29th
Oct. ...	67·5 on 3rd	33·2 on 13th	60·3	49·7	55·0	4·77	17	0·92 on 29th
Nov. ...	60·5 on 9th	27·2 on 30th	53·1	41·2	47·1	5·86	19	1·76 on 23rd
Dec. ...	56·1 on 6th	27·3 on 23rd	50·8	41·9	46·3	3·87	15	0·75 on 6th

The total rainfall of Newport, in the centre of the Isle of Wight, possessing a semi-marine climate, was, in 1808, 28·24in. It was 28·96in. in 1807; 27·32in. in 1806; 29·15in. in 1805; 39·74in. in 1804; 28·53in. in 1803; 24·97in. in 1802; 38·96in. in 1801; 26·31in. in 1800; 28·34in. in 1889; 29·02in. in 1888; 24·43in. in 1887. The mean rainfall in Newport in the ten years 1889-98 was 30·05in.

The total rainfall at Ryde, on the north-east coast, possessing a marine climate, and removed from the central range of chalk downs, was 26.47in. in 1898.

In 1898, there were 150 wet days at Newport. In 1897, there were 172; in 1896, 153; in 1895, 149; in 1894, 183; in 1893, 146; in 1892, 172; in 1891, 172; in 1890, 153; in 1889, 163; in 1888, 179; in 1887, 141; in 1886, 202; in 1885, 159. The mean number of wet days in the ten years 1889—98 was 161.3.

The minimum temperature of the year was 24.6, on March 22nd; and the maximum was 85.8, on August 15th.

The mean temperature for the year was 51.9.

*January.* January was a remarkably mild and dry month. The mean daily maximum temperature was the highest in January for 15 years, with the exception of January, 1890, which was a very wet month. Less rain fell than in any January, probably, since 1864. In 1892, a phenomenally dry January, 0.94in. fell. The rainfall at Newport was 0.42in. and at Ryde, 0.59in.

*February.* February was very similar in its weather and temperature to February, 1896, but it was warmer, and more than twice as wet. 2.49in. of rain fell at Newport in 16 days, and 2.13 at Ryde.

*March.* March was a dry month. Only 0.5in. of rain fell at Newport in 11 days, and 0.48 at Ryde. It was the driest March in at least 10 years; the next driest March was that of 1893, when 0.54in. fell at Newport in 5 days. There was a sharp snap of cold from about the 20th for a week, and, speaking generally, March, 1898 was a much colder month than March, 1897.

*April.* April was also a colder and drier month than April, 1897. Although the mean daily maximum was the same as 1897 (54.6), the thermometer did not rise above 65.7, whereas in 1897, it rose to 70.8. The rainfall at Newport was 1.09 in. in 11 days (it was 2.30 in. in 16 days in April, 1897), and 1.32 in. at Ryde.

*May.* May was a cold, wet month, the wettest May in 20 years. 3.66 in. fell in Newport in 21 days, and 3.72 in. at Ryde. The only recent May to compare with it was May, 1891, when 2.5 in. fell at Newport in 16 days, but it was a warm month. The mean temperature of the month was 2° below that of 1897.

*June.* It was cold and wet for June, although there were only 11 wet days, in which 2.37 in. of rain fell at Newport and 2.62 in. at Ryde. As compared with June, 1897, the mean temperature was 4.3° below that of last year, when it was above the average for June.

*July.* July was a remarkably fine, dry month. The rainfall—0.16 in. in 5 days at Newport, and 0.27 at Ryde—was the lowest for 35 years, and probably the lowest on record. July, 1869 and 1885, were phenomenally dry months, but 0.21 in. fell in the former year, and 0.30 in. in the latter. July, 1897, when 0.44 in. fell in 5 days, was also a very dry month. July, 1897 was warmer, the mean temperature being 65.3° as against 63.1° in 1898, the maximums being 88.4° and 85.8° respectively.

*August.* The rainfall in August was below the average of the month. 1.85 in. fell at Newport in 14 days, and 1.77 in. at Ryde. The mean temperature was 64.6° as compared with 63.3° in August, 1897.

*September.* September was a very warm, dry month. 1.20in. of rain fell at Newport in 6 days, and 1.00in. at Ryde. September, 1895 was also an extraordinarily dry month, 0.45in. of rain falling in 3 days in Newport. The mean temperature of the month was 61.1° as compared with 56.8° in 1897; and the maximum temperature was 85.5°, as compared with 69.0° in 1897, when the rainfall was 2.09in. in 18 days.

*October.* The main features of October were the break up of the long drought and the high temperature. 4.77 inches of rain fell at Newport in 17 days and 3.94in. at Ryde. The mean temperature was 55.0°, as compared with 53.1° in 1897, 51.4° in 1896, and 46.0° in 1895.

*November.* November was a wet, mild, still month. The flowers continued to bloom until quite its end, when there was a frost at night. The mean temperature was 47.1°. 5.86in. of rain fell at Newport in 19 days, the highest monthly rainfall of the year, and 5.30in. at Ryde.

*December.* December was a rather wet, and an extraordinarily mild month, 3.87in. of rain fell at Newport in 15 days, and 3.33in. at Ryde. The mean temperature was 46.3°. It was 42.2° in December, 1897, 42.4° in 1896, and 42.5 in 1895.

The meteorology of 1898 had features, as other years have had, which are described as "phenomenal" or "exceptional" or "peculiar," but our knowledge is not as yet sufficiently exact to enable us to state with precision what constitutes phenomenal or exceptional or peculiar weather in these latitudes. We know that it is governed to a considerable extent by the conflict between the great equatorial and polar currents of air; but it is also

influenced by many causes some of which are only now beginning to be dimly discerned. Other causes which but a few years back were not even suspected are now appreciated as scientific facts. For example, it is certain that the dark spots on the sun's surface are in some way connected with the weather, that there is a certain periodicity in the temperature and rainfall, etc., which corresponds to the eleven years periodicity in the number of sunspots. When the sunspots are at a minimum mild winters and hot summers prevail, and when they are at a maximum cold winters and cool summers would seem to prevail. There is also a thirty-five years' weather period, for observation has shown, apparently, that the rainfall and wetness of the seasons in these latitudes have, as a rule, their maxima and minima at regular intervals of about thirty-five years. At the present time we seem to be in a warm period of decreasing rainfall—the last maximum having been attained in 1882—86. A longer periodicity of a hundred years is also suspected. As the years roll on metereological progress will lend greater aid to sanitary science, and to this end the humble contribution of the metereological record of the year in his district by the Medical Officer of Health in his annual report may be found to be of service in future years.

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### 3. THE SANITARY STATE OF THE DISTRICT GENERALLY AT THE END OF THE YEAR.

Health of the district.

At the end of 1898 the health of your district was remarkably good, a result due to a mild season, and there was scarcely any epidemic disease.

Scarlatina.

A case of scarlatina was convalescing at Parkhurst Barracks. The origin of the poison in the cases at the Barracks I could not trace, but since writing the earlier part of this report I have heard that cases occurred first among the guard at East Cowes in August.

Diphtheria.

There was a case of diphtheria convalescent at Haven Street.

Whooping cough.

Whooping cough, scarcely in an epidemic form, was present in the Arreton and Newport sub-districts.

The Sanitary state of the district generally.

In speaking of the sanitary state of the district generally one cannot generalise. It is necessary to consider the sanitary state of each locality separately, and also to examine the efficiency of the administrative machine of the district, upon the working of which its sanitary state so largely depends. I know that an honest report—and such a report as this would be not only absolutely useless if not honest, it would be criminal—is liable to misconstruction, and to be made use of by persons ignorant of your district, uninformed upon sanitary questions, who have a case to prove against you, for this has happened in the past; but those who are inclined to complain that prejudice is created by quoting me, should try to find some satisfaction in the fact that this report will be read

by those who are familiar with sanitary matters, and who ought to be able to appreciate the great progress made in safeguarding the public health in your district during the past sixteen years. For example, I said in an annual report, crude sewage passed into a stream, and this was quoted by persons who exercised quasi-judicial functions against you as evidence of your incapacity; but an enormous amount of human excrement which formerly passed into the streams of your district, had been permanently kept out of them by your efforts, and at the time I wrote you had no power under the law to abate such a nuisance if it existed before the passing of the Rivers Pollution Act, a fact quite unknown to your critics, and if you had, the process for abatement was almost too cumbersome to be applied. It is not my duty to pass over any matter which in my opinion is detrimental to the interests of the public health; but the assumption is most unfair that the insanitary conditions which exist in your district are the only insanitary conditions which exist in the Isle of Wight; and it is not fair to complain that the annual report places a weapon in the hands of your enemies when the writer has no choice but to state what is the truth to him.

The rapid development of Bembridge should cause you serious concern. It has increased during the ten years (1889-98) by the addition of, approximately, 84 houses. It is sewered and scavenged. In the absence of an independent water supply, the sewers are not properly flushed. The flushing is done by means of sea-water emptied from barrels into the manholes. As deposits accumulate in the manholes, and as there is considerable nuisance from the ventilators from time to time, the conclusion is the flushing is not effectual. The

EAST MEDENE  
Bembridge.

charge for flushing is a shilling a barrel, and as it takes about 17 barrels to clear the High Street sewer alone, one can quite understand the temptation to practise petty economy. You delegated to the Parochial Committee—the Parish Council—the duty of control of the sewers, who appointed a small sub-committee to attend to the flushing. You have very properly resumed control by your decision that the person who holds the scavenging contract shall flush the sewers and be under the direction of the Inspector. The water supply is derived from shallow wells in the plateau gravel, which caps the hill upon which the old village of Brading stands, from rain-water tanks, and from the partial independent supply of the *ci devant* Bembridge Harbour Company pumped from a well in the Bembridge Limestone, in what is known as the Marsh, not far from Brading, to an elevated tank on the highest part of Bembridge, near the old windmill. It was this supply you proposed to purchase. Many of the inhabitants obtain their drinking water from the “North Well” (a shallow well in the gravel), by grace of its owner. It was the water of this well which stank during the water famine last summer. At Lane End, or Foreland Road, an extension of Bembridge to the East, the water is drawn from shallow “dip” wells, liable to pollution, in an old Shingle bed, upon which the houses are built. It is quite extraordinary, of course, that a population dependent upon its visitors should be so indifferent to its material interests that it has not forced upon you long since the performance of your duty in the matter of water supply. Your recent efforts in that direction have met with violent opposition, and yet in going from house to house one has met with apparent unanimity in the desire for an independent water supply. You have now the subject well

in hand, for you have been advised in this instance, with curious inconsistency, to apply to the Corporation of Ryde and the Isle of Wight Water Company to supply Bembridge, to do which they must lay water mains a distance at least as great as from Horsebridge Hill to Gurnard, in the parish of Northwood. It would appear, too, that Bembridge is willing now to accept that which their representatives opposed so forcibly at the Local Government Board Inquiry. If so, they have either changed their minds, or you have been mistaken in this instance, at least, in supposing the mouthpiece you trust really voices the wishes of the parish. I can only repeat what I said in my last Annual Report, that Bembridge has just reached that stage in its development when broad-viewed, liberal policy fosters advancing prosperity, and when the parochial spirit strangles it. It has to be saved from itself. Of course, if the rate-payers of Bembridge are willing to pay for new water-works and a water supply from the Chalk, you will do your best to further their wishes. It is now 1899. In my Annual Report for 1890 I wrote, in describing Bembridge at the end of that year as I am doing now, "until it has an independent water supply, the sanitary condition of Bembridge will not be satisfactory. . . . . An independent water supply may be obtained by sinking in the Chalk at its junction with the Tertiary Beds." Indeed, this has been pointed out for years before and every year since 1890, and now the wise people, whose claim to govern the parish you endorse, inform you they have heard from London that water may be obtained from the Chalk at its junction with the Tertiary Strata, as though it were a new question with you. The most active opponents of the scheme you proposed on the ground of economy are those who have always flouted

the idea of the provision of a proper water supply at all. In the 1890 report which I have quoted I went on to say "or from the Bembridge Limestone. . . . If this supply did not prove sufficient, the pipes could be extended to the Chalk as the place increases in population." This was precisely your idea when you agreed to purchase the proposed supply from the Bembridge Limestone.

Brading.

While Bembridge in the east corresponds to Freshwater in the west, the ancient port of Yarmouth has its counter-part in a still older town which is no longer a port, the ancient borough of Brading. For four or five years Brading seemed to have taken a definite step in advance as Yarmouth has done, but since 1896 no new house has been built, while Yarmouth is still increasing. I attribute this to the fact that Yarmouth has an independent water supply, which Brading lacks. Its water is obtained from rainwater storage, from deep wells in the Chalk, of which there are two or three on the Mall, from shallow wells in the Chalk between the New Road and the Railway, and from public wells in the Bracklesham beds. The water supply is admitted even by the inhabitants to be insufficient and unsatisfactory. It would be a simple matter, as I have pointed out for many years, to pump it to a reservoir on the down from the Chalk at any point where it dips beneath the Tertiary Beds. By far the cheapest supply would have been from the Bembridge Limestone in conjunction with Bembridge, but the Isle of Wight is insular in locality as it is geographically, and Brading will no more have to do with Bembridge than Bembridge with Brading. A section of the population who have what they conceive to be good water supplies, would go to the Ryde Corporation for their water, as this would involve no burden

upon the rates; but given an independent supply it is very doubtful if you would continue satisfied with some of these private supplies. I would again suggest to you that the separate scheme for Brading you caused to be prepared should be reduced so that the initial expenditure would not exceed £2,000. For that sum a good deal may be done, and year by year the water main would grow imperceptibly. Brading will discover its mistake presently. It is only a question of time, and every house will be connected with a water main and will be paying permanently, should it go afield, for what it would have free after paying the cost of pumping. The sewers which are awaiting the advent of a water supply to be properly flushed, discharge on to filtering beds which would be fairly efficient if the Parochial Committee looked after them. One cannot but sympathise with the depression of Brading, for the parish has been cut up more than any other parish to satisfy the cupidity of its neighbours. Even St. Helens has been invited to take a slice, and has the assurance to excuse itself on sanitary grounds. A rearrangement of the boundary line between the two parishes by a fair give and take is not to be thought of, for the County Council, it is said, will never permit any area once administered by an Urban District Council to pass under your jurisdiction. The St. Helens Parochial Schools are situated in the parish of Brading. The children have necessarily to go long distances to them from St. Helens village on the east and from the neighbourhood of Ryde on the west, while those of Nettlestone in the centre are near. These are among the border schools of your district, and when scarlatina occurred there in 1890 you closed them and used the leverage of its presence to force them to be made sanitary; but you could not compel the provision

of a proper water supply because the law does not enable you to do so, a fact of which the County Councillors who held the Inquiry were apparently unaware. The insanitary state of these schools, which are not insanitary save as regards water supply, the provision of which neither you nor any sanitary authority can legally obtain, was urged by the County Council Committee of Inquiry as a reason for detaching them from Brading. Parochial Schools are frequently a difficulty to sanitary authorities as you have found and as has been found by other sanitary authorities, East Cowes for example. The seaweed nuisance on the Brading parish shore, a nuisance which exists at times there as it does along the whole of the St. Helens parish shore, was urged as a reason for detaching it from Brading. If the object is to improve defective sanitation I would advise that the village of St. Helens be added to the parish of Brading. Instead of the absurd and frivolous charges based upon the sanitary question which these committees urge as an excuse for their action, it would be far wiser if the County Council would act impartially and facilitate equitable readjustments of boundaries between parishes, or leave the parishes to settle them themselves. The town of Brading is scavenged, and it would be well if you included in the scavenging contract the duty of attention to the sewers and to the outfall beds under the supervision of your Inspector.

Adgestone.

The hamlet of Adgestone in which the incidence of diphtheria has been so severe from time to time, is closely connected with Brading, as the children attend the Brading Schools. Its sanitary state has been greatly improved in recent years. It has a public pump, from which a portion of the population are supplied with good

water. There should be a similar public water supply provided to the south of the village.

Another hamlet known as Alverstone, situated in the Alverstone, valley of the Yar, about a mile south of Adgestone, has substantially built cottages supplied with water from the Lower Greensand, but the wells generally have not pumps affixed.

Knighton is a hamlet situated between Langbridge, Knighton, which adjoins Newchurch, and Alverstone. The Ryde Waterworks are situated there, and all the wells in the Lower Greensand within the collecting area have become dry. Most of the Cottages and Knighton farm house are now supplied independently from the Waterworks.

Several cottages near the Newchurch Railway Station, Langbridge, in the little hamlet of Langbridge, are supplied from a "dip" well in the Lower Greensand. It would be safer if there were a sealed solid tube well, with a pump in the highway for public use, or better if it were supplied independently.

The village of Newchurch has been greatly improved Newchurch, by your efforts, under the pressure of the presence of diphtheria. Pig nuisances are much complained of still. The water supply, from insufficiently protected wells in the Upper Greensand, is unsatisfactory. In my last Annual Report, I spoke of three or four wells. I may have understated the number, and may have lost sight of one or two pumps; but I have long been confident that, on a porous soil, diphtheria would not be so severe and fatal if the water the people drink were wholesome. Chemical examination sometimes—when the wells are low, or a little after heavy rains—but not always supports

this view. It will be a great mistake if you do not avail yourself of the independent supply which seems within your reach.

Apse Heath.

There were two new houses added to Apse Heath during the year. This prosperous little hamlet on the Newport and Sandown highway—the inhabitants of which find market-gardening profitable—will be saved the risk of water contamination in a porous subsoil, by the independent water supply to be brought from the Upper Greensand at Apse, by the distinguished owner of the land.

Wroxall.

It may appear almost hypercritical to complain of the sanitary state of Wroxall after all the improvement which has taken place there, and especially at the end of the first year of the important sanitary change which an independent water supply from the Upper Greensand has made. But this water supply in anticipation and realization has added greatly to the material wealth of Wroxall, and although only two new houses were added to it in the year under review, as compared with the eighteen added during the previous two years, building operations will be stimulated, the value of land will continue to rise, and the building plots will become smaller, rendering it increasingly difficult to dispose of refuse within the curtilage. The time has come, therefore, when Wroxall should be scavenged. Indeed, scavenging has long been required there, but the paramount necessity of securing a water supply has kept it in the background. I did not urge this next step in sanitary progress at the earliest possible moment, although I foreshadowed the coming of sewers in my last Annual Report, because so many owners were dilatory in laying on the water to their houses, that there was likely to be a debit balance on the

sinking fund account. So many of the existing nuisances can only be effectually dealt with by scavenging however, that having been considerate of the ratepayers in the past, I think you may fairly order forthwith that Wroxall be scavenged.

As Bonchurch, which adjoins Ventnor on the east, Bonchurch. drains into the broken ground formed by the detritus of the Upper Greensand at its back, it is fortunate it is supplied independently with water from the waterworks of that town. It is one of the most salubrious and attractive localities in your district.

The small parish of St. Lawrence is, I believe, confined to the district known as the Undercliff, while the parishes of Whitwell and Niton extend from it inland. I regret I inadvertently credited St. Lawrence in my last Annual Report with more houses than it possesses, and Whitwell in the Undercliff with less. It is a matter of boundary, for the population form one community, but they live in two parishes, and this makes all the difference, because it is a question of money. From the sanitary point of view, the whole of the Undercliff has certain peculiarities. The escarpment, which bounds it landward, is the face of a long down or series of downs, which is, as it were, a large sponge full of water. Between the escarpment and the sea is an area which has somewhat the appearance of a raised beach, but which is, in fact, a terrace of clay, the Gault, covered with blocks of Upper Greensand rock, which have fallen from the escarpment, slowly determining its recession landward. These masses of rock have gradually disintegrated in the course of the years, and a soil has formed which has become covered with vegetation. But beneath this surface there is no homogeneity; large cavities exist

St. Lawrence,  
Whitwell, and  
Niton Undercliff

between the irregular blocks of Greensand, through which is finding its way to the sea, water which has issued from the lower strata of the escarpment or cliff above the Gault clay. Sewage discharged into this subsoil mixes with the water and disappears. Where any possibility of this exists, it must be dangerous to drink the underground water. But it is only necessary to drive a heading into the cliff, into the sponge, a little above the clay, and to collect the water which issues from it in a small reservoir, to obtain a supply of the purest water, which may be piped to any spot below its level or may be pumped to a reservoir on the cliff, from which it may be supplied to any house beneath it. I have thought it necessary to dwell so often upon the conditions which obtain in this district because it is not difficult to see that in course of time the whole of it will be built upon, and it is evident the railway communication recently inaugurated will hasten on the development of the Undercliff in this direction. As yet, only St. Lawrence and the adjoining part of Whitwell, and a part of Niton Undercliff, are at all populous, and it is important that independent water supplies, under the control, if possible, of the Sanitary Authority, should be provided for these more populous places. The Ventnor Water Company have statutory power to supply the parish of St. Lawrence, and they appear to be willing to do so if they can obtain a guarantee of ten per cent. profit on their outlay; but it would be far better if you could initiate a water supply for St. Lawrence and Whitwell Undercliff. It may be possible to do this from the better supply the village of Whitwell will require as it grows. As regards Niton Undercliff, you will probably find it necessary to carry the supply you are about to provide for the village of Niton there. At St. Lawrence, Whit-

well Undercliff, and Niton Undercliff, houses are already supplied in the manner I have described, more particularly at Niton; but in some cases the water is carried in earthenware pipes, and is liable to pollution on this account.

The village of Whitwell, situated on the Gault, has an independent water supply by which its sanitary character has been completely changed. It was in a better state at the end of the year inasmuch as you have assumed control of this supply vested in you, and are managing it as you do the supplies in the other villages. It will be your duty to improve this supply, and as Whitwell grows, of which the presence of the railway gives promise,—three new houses were erected last year, and one in Whitwell Undercliff—its improvement will be a necessity. It will soon be desirable to scavenge Whitwell, and sewers will be required as it becomes more populous.

The little hamlet of Southford—which you have supplied with water from the Whitwell main by a small pipe instead of a large one, which you should have laid—is protected from the risk of drinking the water of a polluted stream. The supply ought to be continued to Redhill and to Ford farm.

Southford and Redhill.

Niton is another clay village, the visible sanitary condition of which has improved greatly in recent years, notwithstanding the pig nuisances; but it greatly needs the water supply which the Parochial Committee have at last consented to receive at your hands. The British Schools have been made sanitary, which is great gain. It seems scarcely credible such a horrible state of things as a cesspit beneath the floor could have escaped me; but

there was nothing to point to it, and no one connected with the schools was aware of its existence. The water supply will tax the energies of Niton in the coming year, but scavenging is becoming increasingly necessary, and all these Gault villages ought to be sewered. The rateable value of Niton is slowly increasing—four new houses were added to it during the year, as against five in 1897.

Godshill.

The sanitary condition of Godshill to-day bears no comparison with its state only a few years back, when had your district possessed bye-laws, it would have been saved a permanent blot due to crowding upon area. It was one of those places in which had cholera appeared the population would have been decimated. Godshill is one of those inland agricultural villages so difficult to the sanitarian, because the water supply is drawn from the subsoil, into which the sewage is discharged. The provision of water supplies and sewers in such villages is not such an easy task as town dwellers suppose. It can only be accomplished by long years of patient waiting and endurance, the endurance which only medical officers of health understand. Godshill reeked in hot weather with the stench of its foul ditches. The pressure of the Authority simply diverted the sewage through the covered road drain—the connections being made at night—into some other ditch, into which it emptied. The system of irregular sewers you were able to arrange at no great cost, which, although not ventilated or flushed, have sweetened the atmosphere of Godshill and improved its sanitation. Many of its wells have been protected, and a great deal of subsoil pollution has been prevented by the substitution of pails for cesspits. There can be no doubt, however, that Godshill should be protected by a proper water supply.

The sanitary condition of the village of Merstone <sup>Merstone.</sup> was satisfactory at the end of the year. No great sanitary improvement can be effected here, nor is it needed. From time to time, however, inspection should be made from house to house in this and similar hamlets.

Arreton was richer by one cottage at the end of the <sup>Arreton.</sup> year—ten new houses built in five years in a purely agricultural village, with railway communication! It drains into the subsoil and into a rivulet which feeds the Yar. An independent water supply would be a protection to Arreton, and it is to be hoped it will be furnished.

The hamlet of Blackwater could be readily supplied <sup>Blackwater.</sup> independently from the plateau gravel on St. George's Down. At present some of the inhabitants obtain their drinking water from this source as it is discharged through agricultural drain pipes into the stream. Others dip their water from surface wells and from the mill pond and stream.

A terrace of houses at Shide, in the parish of Whippingham, on the banks of the stream—into which they drain—which separates them from Newport, are now all supplied with water from the Borough Waterworks; another gain of the year.

The houses crowded upon area in the Fairlee Road, <sup>Fairlee.</sup> just outside Newport, could only be rendered sanitary by an independent water supply and a sewer. The former they possess and the latter you are now providing.

Wootton is a residential place situated partly in North <sup>Wootton.</sup> Arreton and partly in Whippingham, the County Council having thrown the ecclesiastical parish of Wootton into Whippingham, from which it is separated geographically.

This will cause troublesome dislocation, already foreshadowed, as sewerage is pushed on and water provided. Wootton Bridge—the lower part of Wootton—is sewered and has an independent water supply from the Gravel, and there is a public well to the Bembridge Limestone there. There is also a public pump on the highroad a short distance up the hill on which the village of Wootton stands. There is a well to the Bagshot Beds near the railway station which supplies a few cottages there. Otherwise Wootton drains into the gravel and draws its water from the same source. You have a scheme for extending the sewer to the upper part of Wootton, an improvement urgently needed. Twenty-five new houses—four of them in 1898—have been built in five years. Although the sewer will diminish the risk from contamination of the subsoil, the question of a complete scheme of water supply cannot be long postponed.

## Kitehill.

By the sides of the continuation of the high road to Ryde, east of Wootton Creek, there is a collection of houses known as Kitehill. Five or six of them are in the parish of North Arreton, and most of these drain by a sewer into the Creek; the remainder are in the parish of Binstead. Kitehill is supplied from Wootton by an inch water pipe. The whole of the district east of Wootton Creek will eventually be supplied with water from Ryde in all probability.

## Fishbourne.

The small village of Fishbourne, on the eastern entrance of Wootton Creek, has a ship-building industry. Its sanitary state is not satisfactory, sewered as it is by irregular drains, and supplied by one public well to the Bembridge Limestone. This well has, however, been improved and protected, and many of the drains now

discharge below low-water mark. The effect of sanitary control in recent years upon the state of Fishbourne is very marked. Fishbourne requires, however, an independent water supply, and then a properly laid out system of sewers, and it will begin to develop, as other places to the sanitary necessities of which attention has been given, have done.

The decision of the General Purposes Committee of the County Council to annex part of the parish of Binstead to North Arreton is quite incomprehensible from the sanitary standpoint. It requires a water supply, which ought to come by extension of the Binstead main, if the greatest good of the inhabitants is to be considered. Wootton is not likely to be able to furnish such a satisfactory supply either now or in the future. It may be even that the Ryde water main may cross the bridge into Wootton. Equally incomprehensible is the advice given you by the Local Government Board to apply to Ryde to supply Bembridge and Brading, which have sources of water supply as good as those possessed by Ryde. The Binstead and Ashley parts of your district must be supplied with water by Ryde, because they have no other available source of supply. The collecting area of the Corporation is not unlimited, and already their bore hole must be getting very near the Weald Clay, which they can scarcely intend to pierce. If they attempt to supply the country south of the Downs, that to the north of them, including their own town, may run short, and it is your district which will suffer.

Binstead, which adjoins Ryde, has an excellent water supply from the waterworks of that town, and it is sewered. In the near future, extensions of the sewer will be necessary. It continues to increase, four new

houses having been built last year—one of them at Quarr, a residential district of a superior character. Effectual sanitary control has changed Binstead in a manner which only those who knew it a dozen years ago can properly appreciate. But its great drawback is one which has defied your predecessors and you for many years. Pig fattening as an industry is practised there by the connivance of the principal land-holder, in a manner which causes it to be an infliction upon the whole population.

Haylands. At the end of the year, Haylands, in the parish of Ashey, had promise of progress in the proposed sewer in the Upton Road, by the construction of which its development will be hastened. It is supplied with water from the Ryde system, and its sanitary protection has been greatly added to by the closure of wells, and more particularly of those in the Mitchell's Road.

Haven Street. By continued pressure, a large number of the ancient nuisances in the clay village of Haven Street have disappeared. You are about to give it a water supply, which will add greatly to its protection. When that is secured, a sewer will be of great advantage to the place, if only to ensure the sanitation of the Board Schools, where the sewage passes into a cesspit, and cannot fail to be a continual nuisance.

WEST MEDENE.  
Freshwater. The state of Freshwater at the end of the year was, like Bembridge, the state of a place which is insanitary, and which cannot be made sanitary without the expenditure of a considerable amount of money, involving an increased rating. It has an independent water supply, and a very large proportion of the houses are supplied from it. Years ago, for six or eight years, the Sanitary

Authority were urged to provide Freshwater with an independent supply. My annual reports contained accounts of the geological formation of the district, and it was shown that for a comparatively small outlay a magnificent supply could be obtained. The people were appealed to individually and collectively, but all to no purpose. They had plenty of water, they said, and the chemists were invoked to certify its quality. Ten years ago, at least, it was urged that sewers were necessary, and it was pointed out that the water supply must precede sewerage. The charge was made of writing down Freshwater, and the Sanitary Authority were contented with the stereotyped phrase, "the people do not want it." Then pestilence visited the place, and it was particularly fatal because the resisting power of the population was reduced by drinking bad water and by breathing the exhalations from filth which would not soak away in the clay soil. After this parliamentary powers were obtained by a stranger, and a water company was formed, the money being subscribed outside Freshwater. With the usual ignorance and obstinacy some £500, I believe, was at once thrown clean away by an attempt to find water in the Tertiary Strata, notwithstanding the true source of supply in the Secondary rocks had been pointed out for years. This money Freshwater had to pay, but it put its head in the sand and did not see it. The Sanitary Authority and the people were only too thankful they had no responsibility. And now all those persons who had such excellent water are glad enough to pay larger annual charges to a water company in perpetuity when they may have paid less and owned their water supply in thirty years, almost half of which would have now run off. And what thanks do the Sanitary Authority of that day get? They are literally cursed for their

ineptitude. But the water supply exists and the people are so far protected. It is impossible now to contend with the sewage of the place. The rates are charged with a large annual sum for scavenging, and the Parochial Committee are struggling with the nuisance arising from overflowing cesspits, by emptying them. It is an impossible task. The sewage fungus luxuriates in ditches and water courses, and the visitors, who are the wealth of the place, complain bitterly of the stench—for the cesspits are emptied by day as well as night—and it is useless to point out to them that if it “did not use to be so” their health was in greater jeopardy formerly than now. It would be of no service to describe in greater detail the present state of Freshwater; the facts are admitted even by the ratepayers, however much they may minimise them. It is quite true that the obvious nuisances even as regards foul ditches, are enormously diminished, and that Freshwater is a different place, quite apart from its water supply, than it was ten years ago, and so it ought to be, having regard to the attention which been given to it, and to its annual expenditure of £400 or £500 in scavenging. But if the Parochial Committee had manifested more enterprise in the past and present, and would now show a disposition to bend their backs to the burden instead of wailing about their pocket risks, they would receive more sympathy from those who wish Freshwater prosperity. In the meantime you have inherited a pledge to sewer Freshwater, your undertaking is long overdue, and if you are declared in default it will be a lesson to the ratepayers of the whole of your district which they do not deserve. The increase of population in this part of your district may be judged of by the fact that in 1895 22 new houses were built in Freshwater proper, and in 1896, 32. In 1897 there were only 9, apparently because

there was no confidence in the coming of the sewer. Last year 14 new houses were built in Freshwater, and 10 in the Avenue, in the Totland parish, which is included in the sewerage scheme you have for the present adopted. The long delay in the acceptance of bye-laws in your district prejudiced Freshwater as much as any place, for it became the happy hunting ground of the land speculator, the jerry builder, and the money lender when it began to grow. It will long retain evidences of their presence, but it ought to be in a great measure protected from them now. It possesses bye-laws for hackney carriages.

That residential part of the parish of Totland, built on <sup>Totland Bay.</sup> the northern side of the hill from Freshwater which slopes to the sea, is known as Totland Bay. The land is rented to and sub-let by a Company who exercise control. It is in part supplied independently with water from Headon Hill, and in part by the Freshwater Water Company. It is sewered and scavenged; and has special bye-laws for hackney carriages. Five new houses were built in 1898, of superior size and character, as are most of the Totland Bay houses.

Another indentation in the coast line known as Colwell <sup>Colwell Bay.</sup> Bay, between Totland and Yarmouth, is in the parish of Freshwater. It is supplied with water by the Freshwater Water Company, and the sewer which drains Golden Hill Fort is available for many of the houses.

Yarmouth, an ancient borough which was formerly <sup>Yarmouth.</sup> represented in parliament by two members, is the port of the west of the Isle of Wight. Some quarter of a century back it was sewered by your predecessors in opposition, I believe, to the wishes of the inhabitants. Unfortunately, the work was badly done and without foresight, the

sewer having been laid at too shallow depths. It is now supplied with water from the Chalk at Freshwater, and it is scavenged. It was the second place in your district to possess both sewers and an independent water supply, and it is the first one to possess the electric light, furnished by a company. Yarmouth owes very much to the Sanitary Authority in recent years, however much it may have suffered from the then existing Authority five and twenty years ago, and it scarcely becomes the Parochial Committee to be hypersensitive about sanitary reports. In your district these reports are written without reference to their effect upon possible visitors, and are not intended to be *coeur de rose*; they are intended to be exact descriptions of sanitary conditions. If populations wish the benefits which accrue from visitors they should do what is usually done when people wish to obtain incomes, they should invest their money in this case in doing everything possible to safeguard the interests of the public health. If they do so, those whose duty it is, will be only too glad to record the fact. It is very satisfactory that an automatic flushing tank has been fixed in Alma Place to keep that part of the sewer free from deposit. It is a very small matter, perhaps, but the sanitary security of the people has been increased by it. The decision as to the necessity of such arrangements should rest with skilled persons whose business it is, and not with Parochial Committees. Parochial Committees cannot rule places; if they could, the pig nuisance at Yarmouth would have disappeared long ago. To those who have watched over the sanitary interests of Yarmouth and who have had its well-being on their minds and consciences for many years, its progress and prosperity are matters of genuine satisfaction. 23 new houses have been built there in four years, increasing its rateable value considerably. Its private improvements are

potential as regards the future. It has a diligent and faithful representation on its governing body; and it is capable of doing a great deal for itself. If the income is not considered large enough it may be added to by re-assessment.

A building estate adjoining Yarmouth on the east, but in the parish of Shalfleet, known as Bouldner-on-Sea,<sup>Bouldner-on-Sea</sup> is developing. Four new houses of a superior character were built there in 1898. Bouldner is supplied with water by the Freshwater Company. The great difficulty there is drainage. You require that cesspits shall not leak, and it is desirable they should be small; but such cesspits are inefficient for the drainage of large houses such as those at Bouldner. The owners of building estates ought to make sewers, but it is when houses abut upon the high road that such difficulties arise as those which obtain there.

The hamlets of Wellow and Thorley, which may eventually become one village, present quite a different aspect as regards common nuisances when compared with their state a few years ago. Wellow possesses a public pump by the high road, which draws water from the Bembridge Limestone. These places will benefit greatly by the contemplated Shalfleet water supply.

Ningwood is another small hamlet, in which the dearth <sup>Ningwood.</sup> of water in dry seasons—such as that of the summer of 1898—is severely felt, which will be greatly benefitted by an independent supply.

For long years the great sanitary need of Newbridge <sup>Newbridge.</sup> has been pressed, for many of the population have been running daily risk from drinking the water of a polluted

stream into which from time to time dejections containing the poison of enteric fever have passed. When the Shalfleet water supply is laid on to the cottages, this risk will cease. As in all the villages, more or less, the obvious nuisances of Newbridge have disappeared by substituting pail for midden closets and in various other ways.

Calbourne.

The state of the village of Calbourne at the end of 1898 was much the same as at the end of 1897; but improvements in house drainage have taken place during the year, as is always the case when an outbreak of zymotic disease occurs. Then leverage can be applied to clear up insanitary conditions which have been left over. A great deal has been effected in Calbourne. Even the "brook," the *Caulbourne*, has been purified at the cost of great effort, because the people in Calbourne, Newbridge, Shalfleet and elsewhere, drink from it; but its waters cannot be made fit to drink. It has been for long the hope of those who understand the question, that the parishes of Calbourne and Shalfleet would be supplied with water in common—and your scheme for that purpose is still lying at the Local Government Board Office, I believe—but the antagonisms of parishes and the personal element in them, the consequences of which rural sanitary authorities were appointed to obviate for the good of the people, prevail in the Isle of Wight, and have proved too strong in this instance. I can only say the inhabitants of Calbourne drink from the stream, from rain water tanks, from the deep public chalk well, from shallow chalk wells, and from wells in the alluvial gravel and sand.

Shalfleet.

The village of Shalfleet is divided into two parts by the *Caulbourne*, which flows through it. The section to the west of the stream is situated in the parish of Shalfleet,

that to the east of it in the parish of Calbourne. The inhabitants drink from the stream.

The erstwhile borough of Newtown, which has <sup>Newtown.</sup> dwindled to the dimensions of a very small hamlet, has a public well to the Bembridge Limestone, which, by the protection it affords, has completely changed the sanitary character of the place.

Porchfield and Lock's Green, adjoining hamlets on the <sup>Porchfield and Lock's Green.</sup> Bembridge Clay, were described long since by Dr. Ballard as an approbrium to the Sanitary Authority. All that is altered. Most of the cottages have a rain water supply now. There is a shallow public well in a pocket of gravel and sand, on a piece of waste land by the roadside, at Porchfield, thoroughly protected, and with a pump affixed; and there is access to a private well sunk to the Bembridge Limestone. The state of things may not be ideal, but it is very different from that at a time when the people drank from ditches and puddles, and from streams and ponds constantly fouled by cattle.

Gunville Lane, the long straggling hamlet adjoining <sup>Gunville and Forest Side.</sup> Carisbrooke on the north, on each side of the highway which connects it with the Yarmouth Road, has lost its evil reputation, although gutter nuisances, difficult to wholly eradicate in the absence of sewers, still exist. It is supplied with water from the Newport waterworks, and the main is continued to the Yarmouth Road, for the supply of the collection of cottages known as Forest Side. Gunville is developing, and at the south end several new houses were erected during the year on Alvington land. The other frontages on this land, which have been built on in the last few years are in Alvington Road, which is west of Gunville Lane and almost

parallel to it; and Calbourne Road, which is almost at right angles to it. Fourteen new houses were built in this district in 1898.

**The Workhouse.**

The sewerage arrangements at the Workhouse are in better order, judging by the absence of complaints of nuisance. The Workhouse has still the Carisbrooke water available, but a well and bore-hole to the Bagshot Beds, recently completed, will furnish its water supply.

**Parkhurst  
Barracks and  
Prison.**

The Barracks and Prison at Parkhurst are supplied with water independently from the Newport supply. The sewage passes to precipitating tanks, the effluent being discharged into the watercourse which empties into the estuary of the Medina at Dodnor, near the cement works, at which place nuisance from it is sometimes complained of.

**The Medina  
Cement Works.**

Anyone familiar with the cloud of black smoke from the cement works, which formerly passed across the Medina with the prevailing wind, must admit the great change which has taken place as the result of your representations and those of your predecessors. The steam is offensive to some people, but it is not, I think, actually injurious to health.

**Horsebridge Hill**

The sanitary state of Horsebridge Hill was satisfactory at the end of the year. The improvement in this part of your district has been due to the disappearance of obvious nuisances, but especially to the independent water supply from the Newport waterworks. When this supply is continued, the district will increase, as there is a demand for houses there for the accommodation of employees at the Prison. Six new houses were built in 1898.

Two houses were built at Furzyhurst, a district on the <sup>Furzyhurst.</sup> Cowes road badly supplied with water, and which the Northwood water supply will greatly benefit.

Another district in this neighbourhood, that of Tinker's <sup>Tinker's Lane.</sup> Lane or Pallance Road, will receive the supply of wholesome water also, which has been recognised as of vital necessity to it for thirty years. The Northwood Parochial Schools have only a polluted water supply from the gravel, and last summer there was virtually a water famine in this part of your district. The gutter misrances are less in evidence than formerly.

The condition of Gurnard does not change much from <sup>Gurnard.</sup> year to year. It goes on growing slowly—it increased by eight new houses last year—but the impetus which will be given to building operations by an abundant water supply will probably be very great. It is this which it has long needed, but which it has been impossible to give it, and without a water supply a sewer would have been a mistake. The fraction of the population who wish annexation to Cowes, are those who have been desirous of a sewer. Gurnard is a quiet little place on the north-west coast, which has developed from the merest hamlet by reason of making a connection among a certain class of the population resident on the mainland opposite to it, who visit it in the summer months. It has a character of its own, and it is because of its individuality that it is attractive.

In all, 21 new houses were built in the parish of Northwood in 1898.

Carisbrooke is scavenged, it has an independent water <sup>carisbrooke.</sup> supply, and at the time of writing it is being sewered. If for no other reason than that it is the place of greatest

attraction in the Isle of Wight in the sense that more people visit it than any other, it will be most satisfactory to have the gutter nuisances which remain cleared up. It is only those who have sanitary conditions constantly under observation, and who put forth enormous effort in order to keep different localities in a fairly decent state, can realise the almost magic effect of a sewer in abating the kind of filthi nuisances which obtain in the villages of your district. The parish of Carisbrooke contained 16 more houses—two at Bowcombe and fourteen at Alvington—at the end of the year than at the end of 1897.

Chillerton and  
Gatcombe.

The two villages of Chillerton and Gatcombe, which are in different ecclesiastical parishes but form one parish council district, are situated in valleys of the Chalk and Upper Greensand downs. They possess abundant water, but a certain amount of risk obtains of its pollution after it leaves the earth. It would be a very simple thing to give each place an independent water supply. It has been contemplated by the owner of the land to supply Gatcombe by pumping Upper Greensand water—which issues from that formation in great abundance at the bottom of the valley where the Gault lies at no great depth beneath it—to a reservoir on the down.

Chale and  
Blackgang.

Standing as they do on the Gault, Chale and Blackgang must be deficient in underground water and must be liable to filthi nuisances. At Chale Green, whiich is inland about a mile from Church Chale near the sea, these latter were in evidence a few years back, but much improvement has taken place in this respect. No such places in your district need be without water, whiich exists so abundantly in the Upper Greensand about them. Before the close of another year this district may have an abundant supply from this source.

- The village of Shorwell is another Gault village, but <sup>Shorwell</sup> the north part of it is built on the Greensand, and a public well in that formation supplies the cottages. In the south of the village there is a supply on the highway piped from the very strong Upper Greensand spring which issues from the rock at the head of the stream in the grounds of Northcourt House.

The little hamlet of Limerstone on the highroad is also <sup>Limerstone.</sup> supplied from a tap by the roadside from the Upper Greensand by the landowner. It is much to the advantage of the community when all such supplies are in your hands. The water at Limerstone should be laid on to the cottages.

The Brightstone water supply has not only protected <sup>Brightstone.</sup> the people but has added greatly to their comfort and convenience.

The water supply to Brooke House from the Upper <sup>Mottistone, Hulverstone, and Brooke.</sup> Greensand was extended by the present owner to the village, and then to the little hamlets of Hulverstone and Mottistone. It is in contemplation by him to provide a supply from the same formation for Compton farm and cottages. Thus gradually is the public health in your district being protected in the most effective manner.

You possess building bye-laws. They have already <sup>Bye-laws.</sup> been the means of affording security in the present and for the future to a much larger extent than you have any idea of, security which would not exist but for them. As I have already intimated, your bye-laws are not perfect, and do not meet every case. Some of them require to be more explicit and more stringent. I referred to a case

in which the Justices held the requirements of your bye-law as to air space behind a house were met in the case of a new house in which the ground floor was against a cliff, because the first floor was above it. There should be no doubt about your right to retain plans, or their tracings, of new buildings. Many details with reference to new buildings may with advantage be introduced into your bye-laws. For example, in some cases the concrete over the site of a house, a most important requirement, is laid roughly with large cavities, which may prove a source of danger. The concrete should be floated on. You have decided, on the recommendation of the Northwood Parochial Committee, that parti-walls between houses should be 9ins. instead of 4½ins. thick; and this should not be lost sight of when you come to revise your bye-laws. You require regulations, too, of a different character, and among them regulations with reference to pig-keeping. Both Gurnard and Yarmouth have made representations to you upon the subject. The Yarmouth Parochial Committee have requested you also to regulate the removal of house refuse, which you have power to do under your scavenging contract. Regulations inflict no hardship upon the individual. If he is obtaining a personal advantage at the cost of the community he is inflicting a hardship upon those whom it is your duty to protect.

Regulations for dairies, cow-sheds, and milk-shops.

As yet you have no regulations for dairies, cowsheds, and milkshops, but these are inspected, and the requirements of your Inspectors are usually complied with without question. You have appointed a committee to frame regulations.

Slaughterhouses and bakelhouses.

Slaughterhouses and bakelhouses are inspected, but they should be registered. It was apparently an oversight

that the question of the registration of slaughterhouses and bakehouses was not discussed by the General Purposes Committee as you directed.

You regulate the plying for hire of hackney carriages both at Freshwater and Totland Bay, with great advantage to the good order of these watering places.

Your district possesses the protection of the Notification of Infectious Diseases Act, and has done so from the time it first came into operation.

You do not possess an isolation hospital, although for many years your predecessors and you have periodically affirmed adhesion to the principle underlying its provision. Not only so, you have resolved to establish an isolation hospital for your district, and have even given practical effect to your resolution by obtaining the consent of the Local Government Board to purchase a site and erect a building, conditionally upon your undertaking by resolution not to isolate small-pox in the hospital. You did not refuse to pass this resolution, but you resolved by a small majority to abandon the site you had agreed to purchase, ostensibly on sentimental grounds. You have now applied for sanction to purchase another site, apparently without giving due consideration to the requirements involved, and you are opposed by the public of the Isle of Wight on sentimental grounds.

Although with every sanitary district in England and Wales—Scotland is not included!—you suffer from diminished protection against small-pox, as yours is what is known as an anti-vaccination district, the weaker barrier against that loathsome disease possessed by this community before is still further weakened by the

Regulations for  
hackney  
carriages.

Notification of  
infectious  
diseases.

Isolation.

enactment of last year. Some of the objectors have found it in their consciences to expose their helpless children to a terrible risk infinitely greater than the evils they fear, while with others it is no question of conscience at all; by their own admission they have been prompted in obtaining certificates of exemption by selfish, morbid egotism. These are the one-eyed people who can only view public questions from the standpoint of their own interests, or supposed interests, and who have apparently no conception of their duties and responsibilities as citizens to their fellow-citizens. The statement that a larger number of vaccination returns are being made than ever before, as a result of the visits of the public vaccinators may be true, but the deduction drawn is, in my opinion and judging by your district, fallacious. A very large number of educated people are endeavouring to protect the public and themselves by insisting that those they employ and those they accept as tenants shall be revaccinated, but experience teaches that vigilance is followed by apathy in such matters unless the evidence of danger is always actively present. It would seem to be extraordinary that when legislation was taking place upon the subject the supervision of vaccination was not placed in the hands of the sanitary authority; and it seems still more strange that the Government of this country will only supply vaccine lymph now to public vaccinators.

## Inspection

Geographically, and for purposes of local government, your district is divided into two sub-districts—known as the East and West Medene—by the River Medina, which flows through it from South to North. A Sanitary Inspector is appointed in each Medene, who also acts as Surveyor under the Act. There is a Surveyor of Highways in each Medene acting under your direction as the

Highway Authority. It has been suggested that the sub-districts should be further divided, and that these four sub-districts should be officered each by an Inspector who should be the Surveyor of Highways and for sanitary purposes. It is said sufficiently intelligent men may be obtained who, as roadmen, might act under the direction of the Inspector-Surveyor to test the drains and watch the progress of new buildings. You possess exceptionally capable Inspectors, who have good knowledge of Surveyor's work ; both are duly qualified in their profession by public examination ; and I imagine four such men may for a time meet the growing necessities of your district. But the sanitary work is the most important, and that it may be efficiently performed the Inspectors must reside in the centre of the Island. I am unable to judge of the finaneial aspect of the question. You cannot expect to pay lower salaries than you give at present. I will not remark upon this, which is a delicate subject in the Isle of Wight, further than to say the difference in money payment for one class of service as compared with another consists in individual responsibility. I have never heard this so much as referred to in discussions upon the subject. As I reported last year, your bye-laws for new buildings which are conferring so great a benefit upon your district, have involved a heavy increase of work upon your Inspectors. Your own work is increasing to an extent you all appreciate, and whenever you meet you require the presence of the Inspectors, at committee meetings as well as at the meetings of your Council. Most of the subjects you refer to me you refer also to the Inspectors, I assume because they are your Surveyors. They are diligent, but they can only do a certain amount of work, and some department must suffer. As it happens, it is that of inspection. The

question of three inspectors was discussed before you possessed bye-laws, and now the work under the bye-laws must be done, and by two inspectors who were scarcely considered sufficient before they existed. Fortunately the district has been brought into comparative order, and the scavenging of Bembridge, Brading, Carisbrooke, Yarmouth, Freshwater, and Totland, has relieved inspection; the apparent detriment therefore is less than would at first sight appear. I know the whole question is a difficult one, and the decision as to the best course to take must be deliberate. Scavenging has saved the situation, and I can only advise you while the subject is in suspension to adopt public scavenging to a far larger extent than at present obtains in your district. I fear that the appointment of a surveyor for sanitary purposes alone, will not postpone for any lengthened period the necessity for an additional Sanitary Inspector.

**Procedure.**

You carry on your business by means of fortnightly meetings of your Council, the Inspectors' Reports Committee, the General Purposes Committee, Special Committees, and the Parochial Committees.

**Council meetings.**

You meet immediately after the Board of Guardians, of which you are *ex-officio* members. You consider any matter arising out of the minutes; you then take *seriatim* the items on the agenda, including the reports of committees; the correspondence is then read; you refer subjects affecting the different parishes to the respective Parochial Committees; and you decide questions arising upon the Inspectors' reports, which have been referred to you by the Committee, who have examined them; and plans for new buildings are sanctioned and signed. As an example of the large increase of your duties, I may refer to the fact that all the business—including the

reading and discussion of the Inspectors' reports—was formerly done at the fortnightly meetings of the Sanitary Authority.

The Inspectors' Report Books and the comments of the Medical Officer of Health for the fortnight are gone through by a Committee of the whole Council—that is to say, any member of the Council who chooses forms part of the Committee for the day—while the Guardians are sitting. The routine business is disposed of, but more important matters, and those involving legal questions are referred to you.

The General Purposes Committee meet once a month. It is a Committee of the whole Council. To this Committee are referred questions which are likely to occasion prolonged discussion, or which it is desirable should be discussed in committee. You delegate to this Committee the passing of building plans, which have come in after the last Council meeting. All these building plans are carefully examined by the Inspectors, and if they do not conform to the bye-laws, and special difficulties are presented, they should be, and are—as all parts of their work as surveyors should be—referred, first by them to the Medical Officer of Health.

Perhaps, the most important part of your duties is that discharged by the General Purposes Committee. At first it was a selected Committee, and when other members of the Council than those appointed demanded to have a voice in its deliberations, and you made it a Committee of the whole Council, I was very much opposed to the change, for the reasons given in my last Annual Report, p. 106; but the results of its working have proved to me I was mistaken, as I stated on the

same page of that Report. The interests involved are too great, and the issues are too serious to admit of the slightest risk being run. Very small committees are often the most useful, but if a few masterful men are not satisfied unless they are placed on every committee, it is of the first importance that any committee appointed to deal with the general affairs of any district should be a committee of the whole council of that district.

Special Committees.

On the contrary, committees appointed to elaborate special schemes, or to do special work, should be as small as possible, and should have the assistance of your officers. From time to time you appoint such Special Committees, and they do good work if the members have a single eye to the public good.

Parochial Committees.

The first administrative act of the first Rural District Council was to appoint in every parish of their district a Parochial Committee to consist of the members of the Parish Council and the District Councillor or Councillors of the Parish. Such a proposition, confessedly selfish in its inception—to save the trouble of visiting different parts of the district—should never have been made without consultation, and particularly with the Medical Officer of Health, whose eleven years' experience of the district ought to have had some weight. It was rushed at the first meeting of a Council composed largely of new men uninformed upon sanitary questions and unfamiliar with the administration of a sanitary district. For some years there had been an evil influence at work in connection with the Rural Sanitary Authority, the object of which was to establish committees in parishes in which sanitary improvements were being initiated. The effect of these committees was to hinder progress, and when complaint was made it was met by the statement that the

alteration was that committees of the Authority must visit different parts of the district as committees of the Highway Commissioners did. Why not?

The Parochial Committee has now become part of your system of government. Every little petty matter has to be referred to the Parochial Committee before it can be dealt with. Each one of you is a member of a Parochial Committee, and some of you insist that nothing shall be done without the sanction of the parish which you represent, as if your Council were under legal obligations in the matter. And thus a parish veto upon your acts has been established, which is often extremely inconvenient, and which militates against the interests of the parish itself. For it is not the people of the parish, far from it, who exercise this veto, but the Parish Council, upon whom the legislature has not conferred the functions of sanitary administration.

It seems to me that, in the course taken, the law is being strained. As I understand, Parochial Committees are essentially committees of the Sanitary Authority. The law contemplates the appointment of such committees, to which may be added persons who are not members of the Authority—often a convenient arrangement—but if such persons are added, they must be selected from among the members of the Council of the parish. The spirit of the enactment would seem to be that the Sanitary Authority is the predominant element upon the Parochial Committee; but in your district, the only element is the Parish Council, modified by the presence of, perhaps, only one member of your Council. I believe yours is the only Rural District Council in the Kingdom who have established parish government—the worst possible government, as the law stands, in

sanitary matters. If the law spread the cost of sanitary improvements over the whole district of the Sanitary Authority, as in highway matters—which is the ideal arrangement—there would be less objection to your method. The desideratum in rural administration is that the government be spread over as wide an area as possible, in order that the sanitary well-being of the people may be ensured, that it may not depend upon local considerations of any kind ; and the interests of the entire country are involved, for if insanitary areas exist, the districts around are in jeopardy. Local influences *do* exist in the parishes. I will not particularise, but I may refer to one arising out of the lack of homogeneity. A populous village requires a water supply or a sewer. The parish is the contributary place under the law, but as the ratepayers see it, while only the inhabitants of the village will benefit, those of the agricultural section will have to pay the bulk of the cost. It is probable both sections will be represented on the Parish Council, and a necessary sanitary improvement, which it is your duty to provide, will be wrangled over, not on its merits, but on a question of cost. In the end, a compromise may be effected, your scheme is swept away, and what seems to be a less expensive one is substituted, and you acquiesce. The Parish Councils have no officers, and when the new scheme comes before you, your own officers may be in the disagreeable position of having to criticise it—they cannot shirk their responsibilities—and of being charged with opposing you, you having accepted it, and they not having had an opportunity of speaking before. Some of the Parish Councils feel themselves incompetent—as they are—to decide the questions submitted to them, and they would be thankful if you performed your duties without reference to them. It is obvious, one would suppose,

that having regard to their *personnel*, many Parish Councils are unfitted for the duties you impose upon them. I am told that in some of them, the majority have been members of the same family. It would be wise, surely, when important questions and those involving special knowledge have to be decided, that the majority of the Parochial Committees should be members of your Council.

By the devolution of your work to the parishes, you have entirely lost sight of such an important question as that of isolation of infectious diseases in the rural parishes forming, with the town of Ventnor, the Undercliff hospital district. No report is made to you; no accounts are submitted to you; you are practically unrepresented on the Joint Board; and your Medical Officer of Health has absolutely no information whatever on the subject!

Because it is my duty to point out to you what appears to me to be a great weakness in your sanitary administration, I am not oblivious to the great services rendered you by some of the Parochial Committees of your district, and I do not think I misfile this note of appreciation by saying these services have been often due to the personality of one or two of those connected with them, and not infrequently it has been that of the District Councillor.

In concluding the annual report on the health of your district in the year 1898, permit me to say it has been my endeavour to follow closely the order of the Central Authority representing the nation, to whom I am responsible as to you representing the locality. The report is a faithful record of the facts as they appear to the responsible officer, written without reference to the

manner in which they may tell either in this direction or that, or to any consideration apart from the highest sanitary good of the people. At the same time, while adhering strictly to what I conceive to be my duty, I have had the great satisfaction of noting and emphasising the steady progress made by you towards the realization of the greatest amount of protection of the public health in your district, which is attainable in the present state of rapidly increasing knowledge.

I have the honour to be,

Gentlemen,

Your obedient Servant,

J. GROVES.

Carisbrooke.